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NAVAL WEATHER SERVICE DETACHMENT ASHEVILLE N C
SUMMARY OF SYNOPTIC METEOROLOGICAL OBSERVATIONS (SSMO), SOUTH A--ETC(U)
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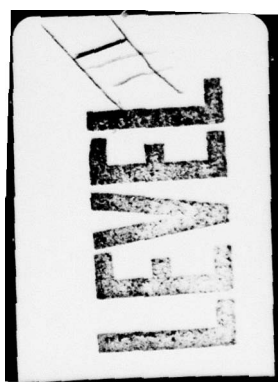
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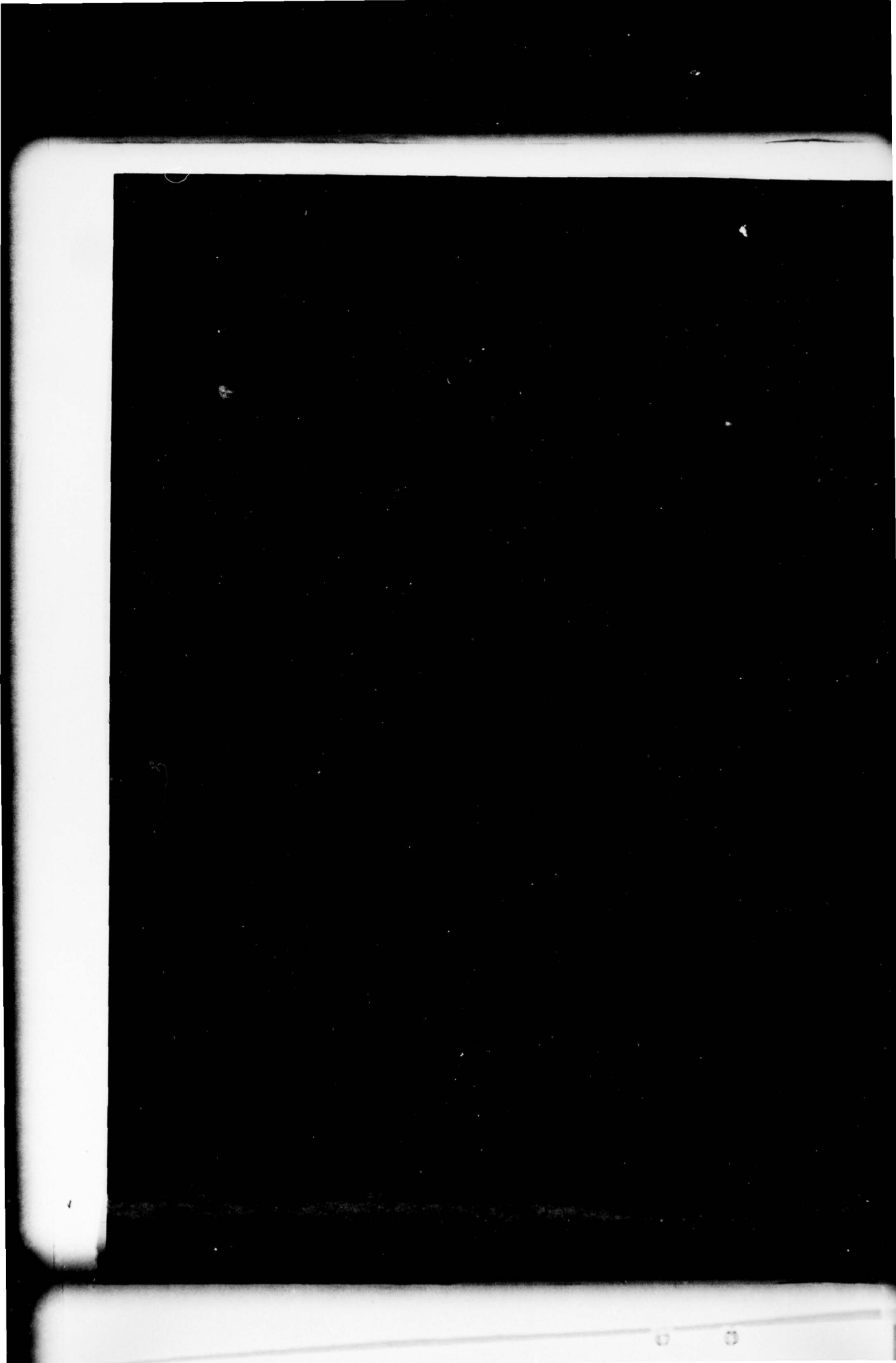
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report presents marine climatological data for specific coastal areas in 21 different tables including weather occurrence, wind direction and speed, cloud amount, ceiling height, visibility, precipitation, dry bulb, relative humidity, air-sea temperature difference, sea height and period, sea surface temperature and sea level pressure.		

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SUMMARY OF
SYNOPTIC METEOROLOGICAL OBSERVATIONS
(SSMO)

SOUTH AMERICA AND SELECTED ISLAND COASTAL MARINE AREAS,
WEST COAST.

VOLUME 4.

AREA 25 - MAGELLAN STRAIT WEST,
AREA 26 - GULF OF PEÑAS,
AREA 27 - VALDIVIA,
AREA 28 - VALPARAISO,
AREA 29 - COQUIMBO,
AREA 30 - ANTOFAGASTA.

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PREPARED BY
THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.
FOR
COMMANDER, NAVAL OCEANOGRAPHY COMMAND

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SUMMARY OF SYNOPTIC METEOROLOGICAL OBSERVATIONS (MONTHLY AND ANNUAL)

The SSMO series of coastal marine summaries is managed and produced by the Naval Weather Service Detachment, Asheville, N. C. for the Commander, Naval Oceanography Command. A list of published SSMO's is contained in the catalogue part of the "Guide to Standard Weather Summaries and Climatic Services", NAVAIR 50-1C-534.

The data summarized in the following tables were obtained from Tape Data Family 11 (TDF-11) Marine Surface Observations. The development and maintenance of TDF-11 was primarily funded by the Naval Weather Service Command. The source of these marine surface observations was punched cards of weather observations taken aboard vessels of varying registry. These observations were recorded on magnetic tape in a common format. Elements not in WMO code were converted to this code where possible. Where this was not possible, the original data were retained within the tape record as supplemental data. A very limited quality control was attempted as the punched cards were converted to taped records and, where possible, missing psychrometric data were computed.

Before the tables are prepared, extreme values of selected parameters are scrutinized so that obvious errors can be excluded. This method is necessarily subjective since the only available record of many observations is the punched card from which the tape records were prepared. Frequently there

Percentage frequencies are computed to hundredths and rounded to tenths. An asterisk (*) indicates percentage frequency > 0 and $< .05$. A value followed by a plus sign indicates greater than or equal to that value (8+ means 8 or greater). NH = low cloud amount (or middle cloud amount when low clouds are not present). The hours given in this publication are GMT.

The geographic position shown on the tables is the central position (centroid) of the observations within the area.

is no concrete evidence to prove or disprove the validity of questionable data.

Also, it should be noted that these data are based upon observations made by ships in passage. Such ships tend to avoid bad weather when possible, thus biasing the data file toward good weather samples.

Because the number of observations may vary from one table to the other, no absolute relationship exists between the tables. As an example, air temperature counts for Tables 13 and 17 may not be identical since only observations containing both air temperature and relative humidity were counted in Table 13 and only those with both temperature and air-sea temperature difference were counted in Table 17. No requirement for simultaneous recording of all elements was made.

The primary period of record is that period (extending back in time from the most recent data) during which eighty percent of the total number of observations were recorded. The overall period is the earliest to the latest observed data used in compiling the tables. Tables 18 and 19 were tabulated from selected decks only and the overall period indicates the period of record of this data source. The primary period for these tables is not shown.

THE TABLES

This value may fall outside irregular areas.

Annual values are computed on the basis of the sum of the monthlies divided by the number of months.

Tables 1 through 19 appear in numerical order for each month, with the annual tables appearing after the tables for December. Tables 20 and 21 appear at the end of the entire series, after the annual summary for Table 19. The series of summaries appear in numerical order by area number.

Table 1 - Percentage Frequency of Weather Occurrence by Wind Direction (8 pts.).

Table 2 - Percentage Frequency of Weather Occurrence by Hour (GMT).

Table 3 - Percentage Frequency of Wind Direction (8 pts.) by Speed and by Hour (GMT). This table includes mean wind speed (kts.) by direction (8 pts.).

Table 3A - Percentage Frequency of Wind Direction (8 pts.) by Speed and by Hour (GMT). This table includes mean wind speed (kts.) by direction.

Table 4 - Percentage Frequency of Wind Speed by Hour (GMT). This table includes mean speed by hour.

Table 5 - Percentage Frequency of Total Cloud Amount (Okta) by Wind Direction (8 pts.). This table includes mean cloud amount by wind direction.

Table 6 - Percentage Frequency of Ceiling Heights (feet, NH $> 4/8$) and Occurrence of NH $< 5/8$ by Wind Direction (8 pts.).

Table 7 - Cumulative Percentage Frequency of Occurrence of Ceiling Height (feet, NH $> 4/8$) and Visibility (Nautical Miles).

Table 7A - Percentage Frequency of Low Cloud Amount (or Middle Cloud Amount if Low Clouds are not present), and Percentage Frequency of Sky Obscured. Amounts are in Oktas.

Table 8 - Percentage Frequency of Wind Direction (8 pts.) vs. Occurrence or Non-Occurrence of Precipitation at Observation Time with Varying Values of Visibility (Nautical Miles).

Table 9 - Percentage Frequency of Wind Direction (8 pts.) vs. Wind Speed (kts.) with Varying Values of Visibility (Nautical Miles).

Table 10 - Percentage Frequency of Ceiling Heights (feet, NH $> 4/8$) and Occurrence of NH $< 5/8$ by Hour (GMT).

Table 11 - Percentage Frequency of Visibility (Nautical Miles) by Hour (GMT).

Table 12 - Cumulative Percentage Frequency of Ranges of Visibility (Nautical Miles) and Ceiling Height (feet, NH $> 4/8$) by Hour (GMT).

Table 13 - Percentage Frequency of Relative Humidity (%) by Air Temperature ($^{\circ}$ F.).

Table 14 - Percentage Frequency of Wind Direction (8 pts.) by Air Temperature ($^{\circ}$ F.).

Table 15 - Means, Extremes, and Percentiles of Air Temperature ($^{\circ}$ F.) by Hour (GMT). Extreme temperatures are the one maximum and one minimum value appearing in the marine data file. The Extremes may be unrepresentative due to sampling errors. Extrapolation from the percentile values usually gives a better estimate of expected extreme conditions.

Table 16 - Percentage Frequency of Relative Humidity (%) by Hour (GMT).

Table 17 - Percentage Frequency of Air Temperature ($^{\circ}$ F.) and the Occurrence of Fog vs. Air-Sea Temperature Difference ($^{\circ}$ F.).

Air-Sea Temperature Difference is:

Positive when the air is warmer than the sea surface; Negative when the air is cooler than the sea surface. In the table heading, the limits of the temperature ranges appear in a vertical arrangement along the top of the table.

Table 18 - Percentage Frequency of Surface Wind Speed (kts.) and Direction (8 pts.) vs. Sea Height (feet). Source deck 128 for which data are available from mid-1963 was used for these tables. This deck represents the latest and most complete homogeneous source of wave data available. Here, only sea waves generated by local winds in the vicinity of the observer are summarized.

Table 19 - Percentage Frequency of Wave Height (feet) vs. Wave Period (seconds). In this table when both sea and swell waves are present in an observation, the higher of the two is used. If both are the same height, the longer period is chosen. When only one of the wave groups is observed, either sea or swell, it is used in the summary. Swell waves are those generated by winds distant from the local area where the observation is taken.

Tables 1-19 appear together for each month and in the annual summary. The following two tables appear at the end of the entire series for each area.

Note: In this volume, percentage frequencies at specified hours of the day refer to percentages of observations taken at those hours, rather than percentages of observations taken at all hours. Data at adjacent hours are summarized with data at synoptic hours, i.e., data from 02 and 04 GMT are combined with data from 03 GMT.

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26	GULF OF PEÑAS	80-158
27	VALDIVIA	159-237
28	VALPARAISO	238-316
29	COQUIMBO	317-395
30	ANTOFAGASTA	396-474

Table 20 - Monthly and Annual Percentage Frequencies and Means of Sea Surface Temperature (° F.).

Table 21 - Monthly and Annual Sea Level Pressures (millibars). This table includes means by hour and for all hours, extreme values and percentile values.

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DIRECTION AND WEATHER CODES

CONVERSION OF WIND AND WAVE DIRECTION TO 8 POINTS

A reduced bias system was employed in converting wind and wave directions to 8 points. This method attaches weighting values to observations which overlap two different 8 point sectors and treats them as "decimal observation counts." These decimal quantities are rounded to whole numbers for presentation as "observational counts" in the tables. Figures 1-4 below show the 8 point system with other systems superimposed.

Note: Because of rounding, sub-total sums of "observation counts" may not equal grand totals.

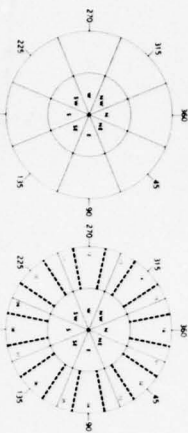


Fig 1 The 8 point direction system.

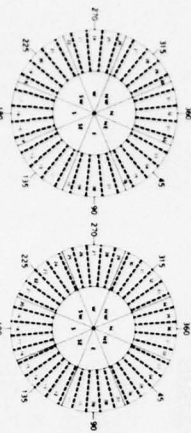


Fig 2 The 16 point direction system superimposed on the 8 point system.

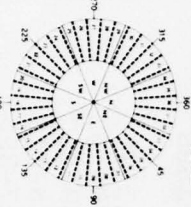


Fig 3 The 32 point direction system superimposed on the 8 point system.

VISIBILITY (VV)

INTERPRETATION
(NAUTICAL MILES)

CODE	INTERPRETATION (NAUTICAL MILES)
90-93	VV<1/2
94	1/2≤VV<1
95	1≤VV<2
96	2≤VV<5
97	5≤VV<10
98	10≤VV<25
99	VV≥25

NOTE: <means less than;
>means greater than;
≤means less than or
equal to; ≥means
greater than or equal
to.

PRESENT WEATHER (1960 WMO CODE 4677)

CODE	INTERPRETATION	CODE	INTERPRETATION
58-59	RAIN	10-12	FOG (WITHOUT PRECIPITATION)
60-65		40-49	FOG (WITHOUT PRECIPITATION)
91-94		28	FOG (WITHOUT PRECIPITATION) PAST HOUR
(68-69, 95, 97 IF TEMP > 40° F)			
80-82, (83-84 IF TEMP > 40° F)	RAIN SHOWERS	04-05	SMOKE HAZE
50-55, 58-59	DRIZZLE	06-09	SPRAY
56-57	FREEZING PRECIPITATION	30-39	BLOWING DUST BLOWING SNOW
66-67			
70-75, 85-86 (68-69, 83-84, 95, 97 IF TEMP ≤ 40° F)	SNOW	00-03	NO SIGNIFICANT WEATHER AT OB TIME
14-16		18	
76-79	OTHER FROZEN PRECIPITATION	00-49	NO PRECIPITATION AT OB TIME
87-90	HAIL	50-99	PRECIPITATION AT OB TIME
93-94			
96, 99			
13, 17	THUNDER LIGHTNING THUNDERSTORM	20-27	PRECIPITATION PAST HOUR
19, 29			
95-99			

NOTE: The following WMO codes were counted in two weather categories: 58-59 (rain and drizzle); 68-69 (rain and snow); 93-94 (rain and hail); 96 and 99 (hail and thunder/lightning/thunderstorm); 95 and 97 (snow and thunder/lightning/thunderstorm), or (rain and thunder/lightning/thunderstorm).

WAVE HEIGHT (from source decks 128 and 116)

RECORDED CODE (HALF METERS)	AS RECORDED RANGE (METERS)	AS RECORDED IN TABULATION (FEET)	RECORDED CODE (HALF METERS)	AS RECORDED RANGE (METERS)	AS RECORDED IN TABULATION (FEET)	RECORDED CODE (HALF METERS)	AS RECORDED RANGE (METERS)	AS RECORDED IN TABULATION (FEET)
00	≤.25}	<1	12	>5.75 to 6.25}	20-22	30	>14.75 to 15.25}	
01	>.25 to .75}	1-2	13	>6.25 to 6.75}		31	>15.25 to 15.75}	
02	>.75 to 1.25}	3-4	14	>6.75 to 7.25}	23-25	32	>15.75 to 16.25}	49-60
03	>1.25 to 1.75}	5-6	15	>7.25 to 7.75}		33	>16.25 to 16.75}	
04	>1.75 to 2.25}	7	16	>7.75 to 8.25}		34	>16.75 to 17.25}	
05	>2.25 to 2.75}	8-9	17	>8.25 to 8.75}	26-32	35	>17.25 to 17.75}	
06	>2.75 to 3.25}	10-11	18	>8.75 to 9.25}		36	>17.75 to 18.25}	
07	>3.25 to 3.75}	12	19	>9.25 to 9.75}				
08	>3.75 to 4.25}	13-16	20	>9.75 to 10.25}		37	>18.25 to 18.75}	61-70
09	>4.25 to 4.75}		21	>10.25 to 10.75}	33-40	38	>18.75 to 19.25}	
10	>4.75 to 5.25}	17-19	22	>10.75 to 11.25}		39	>19.25 to 19.75}	
11	>5.25 to 5.75}		23	>11.25 to 11.75}		40	>19.75 to 20.25}	
			24	>11.75 to 12.25}		41	>20.25 to 20.75}	
			25	>12.25 to 12.75}		42	>20.75 to 21.25}	
			26	>12.75 to 13.25}				
			27	>13.25 to 13.75}		43	>21.25 to 21.75}	71-86
			28	>13.75 to 14.25}	41-48	44	>21.75 to 22.25}	
			29	>14.25 to 14.75}		45	>22.25 to 22.75}	
						46	>22.75 to 23.25}	
						47	>23.25 to 23.75}	
						48	>23.75 to 24.25}	
						49	>24.25 to 24.75}	
						50	>24.75 to 25.25}	
						51	>25.25 to 25.75}	
						52	>25.75 to 26.25}	
						53-99	>26.25 to 49.75}	≥87

Indeterminate=INDET

PERIOD: (PRIMARY) 1898-1978
(OVER-ALL) 1865-1978

AREA 0025 MAGELLAN STRAIT WEST
54.15 73.7W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA						
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FGD WD PCPN	FGD WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG	DUST SNOW	NO SIG WEA
N	9.8	.0	7.3	.0	.0	.0	.0	17.1	7.3	.0	14.6	.0	.0	.0	.0	61.0
NE	40.0	.0	.0	.0	.0	.0	.0	40.0	.0	.0	40.0	.0	.0	.0	.0	20.0
E	7.7	.0	.0	.0	.0	.0	.0	7.7	11.5	.0	.0	.0	.0	.0	.0	80.8
SE	28.1	.0	6.3	.0	.0	.0	.0	34.4	3.1	.0	.0	.0	.0	.0	.0	62.5
S	10.9	.0	4.3	.0	.0	.0	.0	15.2	8.7	.0	.0	.0	.0	.0	.0	76.1
SW	5.3	5.3	1.3	.0	.0	.0	.0	11.8	.0	.0	5.3	.0	.0	.0	.0	82.9
W	8.5	5.3	7.9	.0	.0	.0	.0	18.5	12.2	.0	.0	.0	.0	.0	.0	69.3
NW	15.5	8.3	5.7	.0	.0	.0	.0	29.8	7.3	.0	8.9	.0	.0	.0	.0	54.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	12.8	5.1	5.6	.0	.0	.0	.0	22.4	7.7	.0	6.1	.0	.0	.0	.0	63.8
TOT OBS:	196															

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA						
HOUR (GMT)	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG	DUST SNOW	NO SIG WEA
00603	13.5	1.9	11.5	.0	.0	.0	.0	26.9	7.7	.0	1.9	.0	.0	.0	.0	63.5
06009	15.6	8.9	2.2	.0	.0	.0	.0	24.4	6.7	.0	4.4	.0	.0	.0	.0	64.4
12015	4.3	2.2	4.3	.0	.0	.0	.0	10.9	15.2	.0	2.2	.0	.0	.0	.0	71.7
18021	14.1	10.9	3.1	.0	.0	.0	.0	26.6	3.1	.0	12.5	.0	.0	.0	.0	57.8
TOT PCT	12.1	6.3	5.3	.0	.0	.0	.0	22.7	7.7	.0	5.8	.0	.0	.0	.0	63.8
TOT OBS:	207															

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.3	2.0	2.7	2.1	.7	.2		7.9	18.6		6.0	20.0	6.1	7.0	7.7	29.2	9.5	7.9
NE	.2	1.3	.9	.3	.1	.0		2.8	12.4		1.8	.0	2.6	2.4	1.7	.0	.0	1.9
E	.2	1.0	.3	.1	.0	.0		1.6	9.3		1.3	.0	1.2	1.9	2.3	.0	1.7	1.1
SE	.4	.7	.8	.2	.0	.0		2.1	10.7		3.4	20.0	1.9	1.3	2.7	.0	1.9	1.3
S	.4	1.3	2.0	1.1	.1	.0		4.9	15.7		4.8	.0	5.6	4.3	6.0	.0	5.0	3.8
SW	.2	3.0	7.2	4.5	.9	.2		16.1	18.9		19.4	.0	18.6	18.9	15.8	.0	12.8	17.9
W	.5	3.9	12.0	9.8	4.1	.8		31.1	21.7		29.9	35.0	29.1	30.9	36.1	25.0	30.7	31.5
NW	.6	4.0	11.9	10.6	4.6	1.1		32.8	22.6		33.0	25.0	33.8	32.9	27.8	45.8	33.5	34.6
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	.5	.0	.0	.0	.0	.0		.5	.0		.4	.0	1.1	.4	.0	.0	.8	.0
TOT OBS	70	361	788	598	220	49	2086		20.2		285	5	285	239	263	6	772	231
TOT PCT	3.4	17.3	37.8	28.7	10.5	2.3		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	03	09	12	18
N	1.1	2.6	2.5	1.2	.5		7.9	18.6	6.2	6.5	8.2	9.1	
NE	.8	1.2	.6	.2	.0		2.8	12.4	1.8	2.5	1.7	3.6	
E	.5	.9	.1	.0	.0		1.6	9.3	1.3	1.5	2.2	1.5	
SE	.8	.7	.5	.1	.0		2.1	10.7	3.7	1.6	2.6	1.8	
S	.7	2.0	1.5	.7	.0		4.9	15.7	4.7	5.0	5.9	4.7	
SW	1.4	4.7	7.3	2.3	.5		16.1	18.9	19.1	18.8	15.4	14.0	
W	1.8	8.6	12.6	6.2	2.0		31.1	21.7	30.0	29.9	35.9	30.9	
NW	1.9	8.6	11.5	8.4	2.4		32.8	22.6	32.8	33.4	28.2	33.8	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	.5	.0	.0	.0	.0		.5	.0	.3	.8	.0	.6	
TOT OBS	199	613	764	397	113	2086		20.2	290	524	269	1003	
TOT PCT	9.5	29.4	36.6	19.0	5.4		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1898-1978
(OVER-ALL) 1865-1978

JANUARY

AREA 0025 MAGELLAN STRAIT WEST
54.15 73.7W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3		4-10		WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
						11-21	22-33	34-47				
00003	.3	3.4	17.2	38.6	25.9	11.0	3.4	20.3	100.0	290		
06009	.8	2.3	15.8	38.0	29.8	10.7	2.7	20.6	100.0	524		
12015	.0	1.9	20.4	40.5	26.8	8.9	1.5	19.2	100.0	269		
18021	.6	3.2	17.2	36.7	29.4	10.8	2.1	20.2	100.0	1003		
TOT	11	59	361	788	598	220	49	20.2		2086		
PCT	.5	2.8	17.3	37.8	28.7	10.5	2.3	100.0				

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS) BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.0	1.0	2.2	5.3	7.0	7.0
NE	.0	.0	.2	.9	7.6	7.6
E	.0	.0	1.7	1.7	7.1	7.1
SE	.0	.0	2.6	1.7	7.1	7.1
S	.0	.0	2.6	1.9	7.0	7.0
SW	.2	.9	4.3	5.7	6.9	6.9
W	1.0	2.2	14.3	7.8	6.4	6.4
NH	.2	3.4	14.1	23.1	7.0	7.0
VAR	.0	.0	.0	.0	.0	.0
CALM	.0	.7	.7	.0	5.0	5.0
TOT OBS	2	12	62	69	145	6.8
TOT PCT	1.4	8.3	42.8	47.6	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH > 4/8) AND OCCURRENCE OF NH < 5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH < 5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999			
N	.0	.0	.0	.7	5.3	1.6	.0	.0	.0	.0	1.0	
NE	.7	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0	
E	.0	.0	.5	1.2	.0	.5	.7	.0	.0	.0	.5	
SE	.0	.0	.3	.2	1.7	.5	.7	.0	.0	.0	.3	
S	.0	.0	.5	.0	1.0	1.0	.7	.0	.0	.0	1.2	
SW	.0	.0	.7	4.3	4.1	.0	.7	.0	.0	.0	1.2	
W	.0	.5	1.4	2.9	5.9	2.6	1.2	1.2	.0	.5	9.1	
NH	.0	2.9	.7	3.9	13.4	3.3	.2	1.6	.0	.2	12.8	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	
TOT OBS	1	5	6	22	67	14	6	4	0	1	39	145
TOT PCT	.7	3.4	4.1	15.2	32.4	9.7	4.1	2.8	.0	.7	26.9	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE OF CEILING HEIGHT (NH > 4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)				OR			
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
NH > 6500	.6	.6	.6	.6	.6	.6	.6	.6
NH > 5000	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
NH > 3500	5.8	7.1	7.1	7.1	7.1	7.1	7.1	7.1
NH > 2000	9.7	16.2	16.9	16.9	16.9	16.9	16.9	16.9
NH > 1000	24.0	44.2	48.7	50.0	50.0	50.0	50.0	50.0
NH > 600	33.1	57.8	63.6	65.6	65.6	65.6	65.6	65.6
NH > 300	34.4	62.3	68.8	70.8	70.8	70.8	70.8	70.8
NH > 150	34.4	64.3	72.1	74.0	74.0	74.0	74.0	74.0
NH > 0	34.4	64.3	72.1	74.7	74.7	74.7	74.7	74.7
TOTAL	53	99	111	115	115	115	115	115

TOTAL NUMBER OF OBS: 154

PCT FREQ NH < 5/8: 25.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
.6	1.3	7.5	6.3	9.4	6.9	11.3	12.5	43.8	.6	100

PERIOD: (PRIMARY) 1898-1978
(OVER-ALL) 1865-1978

JANUARY

AREA 0025 MAGELLAN STRAIT WEST
54.15 73.7W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.5	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	1.5
	TOT %	.5	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	1.5
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5	.5
	NO PCP	.0	.5	.0	.0	.0	.0	.0	.5	.0	.0	.0	1.0
	TOT %	.0	.5	.0	.0	.0	.0	.0	1.0	.0	.0	.5	1.5
2<5	PCP	.5	.0	.0	.3	.3	.1	1.1	1.8	.0	.0	.0	4.1
	NO PCP	.8	.0	.5	.0	.0	.0	1.5	1.8	.0	.0	.0	4.6
	TOT %	1.3	.0	.5	.3	.3	.1	2.7	3.6	.0	.0	.0	8.7
5<10	PCP	1.3	.5	.3	1.1	.6	1.0	3.3	9.2	.0	.0	.0	17.3
	NO PCP	3.4	.0	.8	1.0	2.8	1.0	5.0	11.5	.0	.0	.0	25.5
	TOT %	4.7	.5	1.0	2.2	3.4	2.0	8.3	20.7	.0	.0	.0	42.9
10+	PCP	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.5
	NO PCP	4.0	.3	1.8	1.7	2.2	7.5	13.1	13.4	.0	1.0	.0	44.9
	TOT %	4.0	.3	1.8	1.7	2.2	7.5	13.1	13.9	.0	1.0	.0	45.4
TOT OBS		196											
TOT PCT		10.5	1.3	3.3	4.1	5.9	9.7	24.1	40.2	.0	1.0	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5	.5
	22+	.5	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	1.0
	TOT %	.5	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	1.5
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5
	22+	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	1.0
	TOT %	.0	.5	.0	.0	.0	.0	.0	1.0	.0	.0	.0	1.5
2<5	0-3	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0	.0	.5
	4-10	.2	.0	.0	.0	.0	.1	.4	.7	.0	.0	.0	1.5
	11-21	.0	.0	.5	.0	.0	.0	2.2	.2	.0	.0	.0	2.9
	22+	1.0	.0	.0	.0	.0	.0	.0	2.5	.0	.0	.0	3.4
	TOT %	1.2	.0	.5	.2	.2	.1	2.6	3.4	.0	.0	.0	8.3
5<10	0-3	.0	.5	.0	.0	.0	.0	.0	.0	.0	.5	.5	1.0
	4-10	1.2	.0	1.0	.5	.5	.5	.5	1.7	.0	.0	.0	5.9
	11-21	2.3	.0	.0	1.3	2.1	1.5	4.0	7.4	.0	.0	.0	18.6
	22+	1.0	.0	.0	.2	.7	.0	3.4	11.3	.0	.0	.0	16.7
	TOT %	4.5	.5	1.0	2.1	3.3	2.0	8.0	20.3	.0	.5	.5	42.2
10+	0-3	.0	.0	.0	1.0	.0	.0	.4	.1	.0	1.0	.0	2.5
	4-10	1.5	.2	1.0	.5	1.0	2.7	2.7	1.7	.0	.0	.0	11.3
	11-21	2.3	.0	.4	.5	.6	3.4	5.0	6.9	.0	.0	.0	19.1
	22+	.5	.0	.4	.1	.5	3.1	4.5	4.7	.0	.0	.0	13.7
	TOT %	4.3	.2	1.7	2.1	2.1	9.2	12.6	13.4	.0	1.0	.0	46.6
TOT OBS		204											
TOT PCT		10.5	1.2	3.2	4.4	5.6	11.3	23.2	39.1	.0	1.5	100.0	

PERIOD: (PRIMARY) 1898-1978
(OVER-ALL) 1805-1978

JANUARY

AREA 0025 MAGELLAN STRAIT WEST
54.15 73.7W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	.0	2.4	2.4	22.0	31.7	9.8	4.9	2.4	.0	2.4	78.0	22.0	41
06009	.0	3.3	3.3	23.3	30.0	13.3	.0	3.3	.0	.0	76.7	23.3	30
12015	.0	5.3	13.2	5.3	31.6	2.6	7.9	.0	.0	.0	65.8	34.2	38
18021	2.1	2.1	2.1	14.9	36.2	12.8	2.1	4.3	.0	.0	76.6	23.4	47
TOT	1	5	8	25	51	15	6	4	0	1	116	40	156
PCT	.6	3.2	5.1	16.0	32.7	9.6	3.8	2.6	.0	.6	74.4	25.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	1.9	13.0	36.9	46.3	54
06009	.0	.0	.0	10.4	36.3	33.3	48
12015	.0	.0	2.1	2.1	39.6	56.3	48
18021	.0	4.6	3.1	9.2	40.0	43.1	65
TOT	0	3	4	19	93	96	215
PCT	.0	1.4	1.9	8.8	43.3	44.7	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOURL (GMT)	<150 <30YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.0	4.9	39.0	39.0	22.0	41
06009	.0	6.9	31.0	44.8	24.1	29
12015	.0	18.4	23.7	42.1	34.2	38
18021	2.2	6.5	30.4	50.0	19.6	46
TOT	1	14	48	68	38	154
PCT	.6	9.1	31.2	44.2	24.7	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
60/64	.0	.0	.0	.0	1.2	.0	.0	.0	2	1.2
55/59	.0	.0	.0	.0	2.4	1.2	2.4	.0	11	6.7
50/54	.0	.0	.0	.6	6.1	4.8	9.7	4.2	42	25.5
45/49	.0	.0	.0	.6	1.8	14.5	14.5	13.3	74	44.8
40/44	.0	.0	.0	.0	1.2	3.5	9.7	5.5	36	21.8
TOTAL	0	0	0	2	21	43	60	39	165	100.0
PCT	.0	.0	.0	1.2	12.7	26.1	36.4	23.6		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
60/64	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
55/59	2.2	.0	.0	.0	1.2	.2	.5	1.4	.0	1.2
50/54	3.5	1.2	.9	.3	.0	2.6	4.8	13.2	.0	.0
45/49	1.8	1.2	3.0	2.0	.9	6.2	10.3	19.4	.0	.0
40/44	.8	.0	.0	2.9	5.0	3.2	6.4	3.6	.0	.0
TOTAL	8.3	2.0	3.9	5.8	7.1	12.1	22.0	37.6	.0	1.2

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	63	59	54	47	42	40	40	47.6	286
06009	58	54	52	46	41	39	37	46.6	515
12015	55	54	52	47	42	41	38	47.0	260
18021	59	56	53	48	43	40	34	47.7	974
TOT	63	56	53	47	42	40	34	47.3	2035

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	2.2	17.4	28.3	28.3	23.9	80	46
06009	.0	.0	5.3	28.9	39.5	26.3	84	38
12015	.0	.0	5.9	35.3	41.2	17.6	81	34
18021	.0	3.8	17.0	18.9	37.7	22.6	81	53
TOT	0	3	21	46	62	39	81	171

PERIOD: (PRIMARY) 1898-1978
(OVER-ALL) 1865-1978

JANUARY

AREA 0025 MAGELLAN STRAIT WEST
54.1S 73.7W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	33 36	37 40	41 44	45 48	49 52	53 56	57 60	61 64	TOT	W FOG	WQ FOG
11/13	.0	.0	.0	.0	.0	.0	1.1	.5	3	.0	1.6
9/10	.0	.0	.0	.0	.0	.5	1.1	.0	3	.0	1.6
7/8	.0	.0	.0	.0	.5	3.7	.5	.0	9	.0	4.7
6	.0	.0	.0	.0	.0	1.1	.0	.0	2	.0	1.1
5	.0	.0	.0	.0	2.1	2.6	.0	.0	9	.5	4.2
4	.0	.0	.0	.5	2.1	1.6	.0	.0	8	.5	3.7
3	.0	.0	.0	.5	4.2	1.6	.0	.0	12	.0	6.3
2	.0	.0	.0	3.7	5.3	.0	.0	.0	17	1.1	7.9
1	.0	.0	.0	4.2	4.2	.5	.0	.0	17	1.6	7.4
0	.0	.0	1.6	7.9	4.2	.5	.0	.0	27	.0	14.2
-1	.0	.0	1.6	8.9	3.7	.0	.0	.0	27	.5	13.7
-2	.5	.5	2.1	6.3	2.1	.5	.0	.0	23	1.1	11.1
-3	.0	.0	3.7	3.2	.5	.0	.0	.0	14	.0	7.4
-4	.0	.5	2.1	1.6	.0	.0	.0	.0	8	.5	3.7
-5	.0	.0	1.6	1.1	.0	.5	.0	.0	6	.0	3.2
-6	.0	.5	1.1	.5	.0	.0	.0	.0	4	.5	1.6
-7/-8	.0	.0	.0	.5	.0	.0	.0	.0	1	.0	.5
TOTAL	1	3	26	74	55	25	5	1	190	12	178
PCT	.5	1.6	13.7	38.9	28.9	13.2	2.6	.5	100.0	6.3	93.7

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.7	.0	.0	.0	.0	.7	.0	.2	.0	.0	.0	.0	.2
1-2	.0	2.3	3.2	.0	.0	.0	5.4	.0	.2	.9	.0	.0	.0	1.1
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.7	.9	.0	.0	1.6	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.9	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.9	.0	.9	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.9	3.8	1.8	.9	.0	9.5	.0	.5	.9	.0	.0	.0	1.4

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.9
1-2	.0	1.8	.0	.0	.0	.0	1.8	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.9
5-6	.0	.0	1.6	.0	.0	.0	1.6	.0	.0	.5	.2	.0	.0	.7
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.2
10-11	.0	.0	.0	.7	.0	.0	.7	.0	.0	.0	.2	.0	.0	.2
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.8	1.6	.7	.0	.0	4.1	.9	.9	.5	.7	.0	.0	2.9

PERIOD: (OVER-ALL) 1963-1978

JANUARY
TABLE 18 (CONT)AREA 0025 MAGELLAN STRAIT WEST
54.15 73.7W

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2
1-2	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	1.8
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.9	.0	.0	1.8
5-6	.0	.0	.7	.7	.0	.0	1.4	.0	1.8	2.7	1.8	.0	.0	6.3
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.9	.7	.0	.0	1.6	.0	.0	.9	.2	.0	.0	1.1
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.9
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	1.4	1.4	.0	.0	2.9	.9	2.9	4.5	3.8	.0	.0	12.2

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.7	.0	.0	.0	.0	.7	.0	.9	.0	.0	.0	.0	.9	
1-2	.7	.0	.0	.0	.0	.0	.7	.2	1.1	4.1	.0	.0	.0	5.4	
3-4	.0	.0	2.7	.9	.0	.0	3.6	.0	.0	1.8	1.8	.0	.0	3.6	
5-6	.0	.0	4.7	2.7	.0	.0	7.4	.0	.0	3.6	9.0	.9	.0	13.5	
7	.0	.9	4.1	4.3	.0	.0	9.2	.0	.9	4.1	7.4	.0	.0	12.4	
8-9	.0	.0	.0	1.4	.9	.0	2.3	.0	.0	.0	1.1	.0	.0	1.1	
10-11	.0	.0	.0	2.5	.0	.0	2.5	.0	.0	.0	1.1	.0	.0	1.1	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.9	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.7	1.6	11.4	11.7	.9	.0	26.4	.2	2.9	13.5	20.5	1.8	.0	39.0	98.2

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	2.7	2.7	.0	.0	.0	.0	5.4	
1-2	1.8	6.3	8.1	.0	.0	.0	16.2	
3-4	.0	.9	5.4	3.6	.0	.0	9.9	
5-6	.0	1.8	14.4	15.3	.9	.0	32.4	
7	.0	1.8	8.1	11.7	.0	.0	21.6	
8-9	.0	.0	1.8	3.6	.9	.0	6.3	
10-11	.0	.0	.0	6.3	.0	.0	6.3	
12	.0	.0	.0	.0	.9	.0	.9	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.9	.0	.9	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	4.5	13.5	37.8	40.5	3.6	.0	100.0	111

PERIOD: (OVER-ALL) 1959-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	3.1	7.0	3.1	7.8	5.5	1.6	4.7	3.1	5.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	53	6
6-7	.0	.0	2.3	.8	3.9	3.9	1.6	3.1	2.3	1.6	.8	.0	.0	.0	.0	.0	.0	.0	.0	26	10
8-9	.0	.0	.0	.8	2.3	6.3	2.9	2.3	.8	1.6	1.6	.0	.0	.0	.0	.0	.0	.0	.0	25	10
10-11	.0	.0	.0	.0	.8	.0	1.6	.8	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	11
12-13	.0	.0	.0	.8	.8	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	7
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	
INDET	2.3	4.7	.0	.8	1.6	3.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	16	4
TOTAL	7	15	7	14	19	19	16	12	11	5	3	0	0	0	0	0	0	0	0	128	8
PCT	5.5	11.7	5.5	10.9	14.8	14.8	12.5	9.4	8.6	3.9	2.3	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1904-1978
(OVER-ALL) 1870-1978

FEBRUARY

AREA 0025 MAGELLAN STRAIT WEST
53.85 73.9W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	9.5	2.4	14.3	.0	.0	.0	.0	26.2	13.1	.0	11.9	4.8	.0	.0	44.0
NE	33.3	.0	22.2	.0	.0	.0	.0	55.6	.0	.0	.0	.0	.0	.0	44.4
E	11.1	.0	22.2	.0	.0	.0	.0	33.3	.0	.0	.0	.0	.0	.0	66.7
SE	3.7	.0	.0	.0	.0	.0	.0	3.7	.0	.0	.0	.0	.0	.0	96.3
S	17.5	10.0	.0	.0	.0	.0	.0	27.5	.0	.0	.0	.0	.0	.0	72.5
SW	7.4	14.8	7.4	.0	.0	.0	.0	29.6	.0	.0	.0	.0	.0	.0	70.4
W	13.2	7.1	1.9	.0	.0	.0	.9	23.1	7.1	.0	.0	.0	.0	.0	69.8
NW	5.5	14.2	3.7	.0	.0	.0	.9	24.2	8.2	.0	13.7	.0	.0	.0	53.9
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT	10.1	8.9	5.3	.0	.0	.0	.6	24.9	6.5	.0	5.9	.6	.0	.0	62.1
PCT OBS:	169														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA								
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG BLWG	DUST SNOW	NO SIG WEA
00003	6.8	4.5	9.1	.0	.0	.0	.0	20.5	4.5	.0	4.5	.0	.0	.0	.0	70.5
06009	8.7	15.2	4.3	.0	.0	.0	.0	28.3	4.3	.0	8.7	.0	.0	.0	.0	58.7
12015	9.8	7.3	7.3	.0	.0	.0	2.4	26.8	9.8	.0	4.9	2.4	.0	.0	.0	56.1
18021	14.0	7.0	2.3	.0	.0	.0	.0	23.3	7.0	.0	4.7	.0	.0	.0	.0	65.1
TOT PCT	9.8	8.6	5.7	.0	.0	.0	.6	24.7	6.3	.0	5.7	.6	.0	.0	.0	62.6
TOT OBS:	174															

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	0-3	WIND SPEED (KNOTS)					48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
		4-10	11-21	22-33	34-47	00					03	06	09	12	15	18	21
N	.3	1.3	1.8	1.8	.9	.1		6.1	20.4	4.6	12.5	7.2	6.4	4.6	.0	7.6	4.1
NE	.1	.6	.7	.5	.0	.0		1.9	14.4	1.8	.0	3.1	1.6	2.0	.0	1.4	1.9
E	.3	.4	.4	.0	.1	.0		1.2	10.2	1.1	.0	.4	1.2	1.0	.0	2.0	.8
SE	.3	1.2	.5	.3	.1	.0		2.3	11.3	2.6	16.7	2.2	2.0	2.1	8.3	2.4	2.1
S	.5	1.7	1.5	1.1	.2	.2		5.2	16.0	6.0	16.7	6.9	5.1	4.3	8.3	4.5	4.7
SW	.7	3.5	6.7	4.0	3.0	.7		18.6	21.3	17.8	8.3	23.5	24.3	19.0	.0	14.8	17.8
W	.8	4.8	12.4	9.3	4.8	1.5		33.6	22.2	35.5	25.0	28.8	33.2	34.4	33.3	33.9	36.0
NW	.6	2.9	10.9	9.6	4.0	1.3		30.2	22.7	30.1	20.8	27.4	25.4	31.0	50.0	32.3	32.6
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.8							.8	.0	.4	.0	.7	.8	1.6	.0	1.0	.0
TOT OBS	80	322	643	490	242	71	1850		21.0	269	6	276	237	254	6	595	207
TOT PCT	4.3	17.4	34.9	26.5	13.1	3.8		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
		7-16	17-27	28-40	00 03					06 09	12 15	18 21		
N	1.1	1.3	2.1	1.3	.4		6.1	20.4	4.8	6.8	4.5	6.7		
NE	.4	.8	.4	.2	.0		1.9	14.4	1.7	2.4	1.9	1.6		
E	.5	.5	.2	.1	.0		1.2	10.2	1.1	.7	1.0	1.7		
SE	.9	.9	.5	.1	.1		2.3	11.3	2.9	2.1	2.2	2.3		
S	1.0	2.1	1.3	.5	.2		5.2	16.0	6.3	6.0	4.4	4.6		
SW	2.0	5.6	5.4	3.7	1.9		18.6	21.3	17.6	23.8	18.6	15.6		
W	2.4	9.5	11.8	6.6	3.2		33.6	22.2	35.3	30.8	34.4	34.4		
NW	1.4	8.2	11.1	6.5	3.1		30.2	22.7	29.9	26.5	31.4	32.4		
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		
CALM	.8						.8	.0	.4	.8	1.5	.7		
TOT OBS	194	536	605	350	165	1850		21.0	275	513	260	802		
TOT PCT	10.5	29.0	32.7	18.9	8.9		100.0		100.0	100.0	100.0	100.0		

FEBRUARY

PERIOD: (PRIMARY) 1904-1978
(OVER-ALL) 1870-1978

AREA 0025 MAGELLAN STRAIT WEST
53.85 73.9W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
00003	.4	2.5	22.2	36.4	21.8	12.0	4.7	20.6	100.0	275
06009	.8	3.1	18.7	35.7	25.1	12.3	4.3	20.9	100.0	513
12015	1.5	3.8	17.7	36.2	28.8	8.8	3.1	19.9	100.0	260
18021	.7	4.0	14.8	33.4	28.2	15.3	3.5	21.6	100.0	802
TOT	15	65	322	645	490	242	71	21.0		1850
PCT	.8	3.5	17.4	34.9	26.5	13.1	3.8		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	2.3	.8	4.2	6.5		6.0
NE	.0	.0	.8	1.7		7.6
E	.0	.0	.0	.8		8.0
SE	.0	.0	.8	4.8		7.8
S	.0	.8	3.1	4.4		6.9
SW	.0	1.3	2.7	4.6		6.8
W	.0	2.9	16.0	14.4		6.9
NH	1.0	2.5	11.5	11.4		6.6
VAR	.0	.0	.0	.0		.0
CALM	.8	.0	.0	.0		.0
TOT OBS	5	10	47	58	120	6.7
TOT PCT	4.2	8.3	39.2	48.3	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.8	.8	1.3	1.5	2.1	.4	.6	.0	.0	.0	.0	6.3
NE	.0	.0	.0	.0	.0	1.7	.0	.0	.0	.0	.0	.8
E	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0
SE	.0	.0	.0	4.4	.0	.4	.0	.0	.0	.0	.0	.8
S	.0	.0	.0	2.3	.0	2.9	.0	.0	.0	.0	.0	3.1
SW	.0	.0	.0	1.0	1.7	2.3	.8	.4	.0	.0	.0	2.3
W	1.5	.0	.0	8.3	5.2	7.9	.8	1.3	.8	.0	.0	7.5
NH	.2	.0	1.3	4.2	6.0	3.9	.2	.0	.0	.0	.0	7.5
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8
TOT OBS	3	1	3	27	18	27	3	2	1	0	35	120
TOT PCT	2.5	.8	2.5	22.5	15.0	22.5	2.5	1.7	.8	.0	29.2	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.0	.8	.8	.8	.8	.8	.8	.8
>4000	1.6	2.4	2.4	2.4	2.4	2.4	2.4	2.4
>3500	4.1	4.9	4.9	4.9	4.9	4.9	4.9	4.9
>2000	13.8	25.2	26.8	26.8	26.8	26.8	26.8	26.8
>1000	17.9	36.6	39.8	41.5	41.5	41.5	41.5	41.5
>400	26.8	56.1	60.2	63.4	63.4	63.4	63.4	63.4
>300	27.6	58.5	63.4	66.7	66.7	66.7	66.7	66.7
>150	27.6	58.5	63.4	67.5	67.5	67.5	67.5	67.5
>0	27.6	60.2	65.0	69.1	69.9	69.9	69.9	69.9
TOTAL	34	74	80	85	86	86	86	86

TOTAL NUMBER OF OBS: 123

PCT FREQ NH <5/8: 30.1

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
3.1	2.3	8.5	8.5	7.0	5.4	16.3	10.9	35.7	2.3	129

PERIOD: (PRIMARY) 1904-1978
(OVER-ALL) 1870-1978

FEBRUARY

AREA 0025 MAGELLAN STRAIT WEST
53.85 73.9W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	1.2	.0	.0	.0	.0	.0	.6	1.2	.0	.0	.0	3.0
	TOT %	1.2	.0	.0	.0	.0	.0	.6	1.2	.0	.0	.0	3.0
1<2	PCP	1.5	.0	.0	.0	.0	.6	.0	.9	.0	.0	.0	3.0
	NO PCP	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.6
	TOT %	1.5	.0	.0	.0	.0	.6	.6	.9	.0	.0	.0	3.6
2<5	PCP	.3	.0	.0	.0	.0	.6	.0	.9	.0	.0	.0	1.8
	NO PCP	.6	.0	.0	.0	.0	.0	.6	.6	.0	.0	.0	1.8
	TOT %	.9	.0	.0	.0	.0	.6	.6	1.5	.0	.0	.0	3.6
5<10	PCP	.9	.9	.9	.1	1.0	1.2	6.1	5.5	.0	.0	.0	16.6
	NO PCP	2.1	.0	.6	1.5	2.7	.7	8.0	14.6	.0	.0	.0	30.2
	TOT %	3.0	.9	1.5	1.6	3.7	1.9	14.1	20.1	.0	.0	.0	46.7
10+	PCP	.6	.6	.0	.0	.6	.0	1.2	.6	.0	.0	.0	3.6
	NO PCP	5.3	1.2	1.2	2.4	1.6	4.9	14.3	8.1	.0	.0	.0	39.6
	TOT %	5.9	1.8	1.2	2.4	2.2	4.9	15.5	8.7	.0	.0	.0	43.2
TOT OBS													169
TOT PCT													100.0

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6
	22+	.6	.0	.0	.0	.0	.0	.6	1.2	.0	.0	.0	2.4
	TOT %	1.2	.0	.0	.0	.0	.0	.6	1.2	.0	.0	.0	2.9
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6
	11-21	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.6
	22+	.9	.0	.0	.0	.0	.6	.0	.9	.0	.0	.0	2.4
	TOT %	1.5	.0	.0	.0	.0	.6	.6	.9	.0	.0	.0	3.5
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.6
	11-21	.6	.0	.0	.0	.0	.6	.0	.6	.0	.0	.0	1.8
	22+	.3	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	1.2
	TOT %	.9	.0	.0	.0	.0	.6	.6	1.5	.0	.0	.0	3.5
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.6	.0	.0	.0	.6	.3	.6	.3	.0	.0	.0	2.4
	11-21	1.5	.6	1.2	.1	1.6	1.5	8.1	10.7	.0	.0	.0	25.3
	22+	.9	.3	.3	1.5	1.5	.1	5.9	9.0	.0	.0	.0	19.4
	TOT %	2.9	.9	1.5	1.6	3.7	1.9	14.6	20.0	.0	.0	.0	47.1
10+	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.6	1.2	.6	.6	1.2	1.9	3.7	2.1	.0	.0	.0	11.8
	11-21	2.2	.6	.6	1.2	1.0	2.9	10.9	4.7	.0	.0	.0	24.1
	22+	3.1	.0	.0	.6	.0	.0	.9	1.9	.0	.0	.0	6.5
	TOT %	5.9	1.8	1.2	2.4	2.2	4.9	15.4	8.7	.0	.0	.0	42.9
TOT OBS													170
TOT PCT													100.0

PERIOD: (PRIMARY) 1904-1978
(OVER-ALL) 1870-1978

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	2.7	2.7	5.4	21.6	10.8	21.6	2.7	2.7	2.7	.0	73.0	27.0	37
06009	3.6	.0	3.6	7.1	28.6	17.9	.0	.0	.0	.0	60.7	39.3	28
12015	3.0	.0	3.0	27.3	15.2	27.3	3.0	3.0	.0	.0	81.8	18.2	33
18021	.0	.0	.0	30.8	3.8	19.2	3.8	.0	.0	.0	57.7	42.3	26
TOT	3	1	4	27	18	27	3	2	1	0	86	38	124
PCT	2.4	.8	3.2	21.8	14.5	21.8	2.4	1.6	.8	.0	69.4	30.6	100.0

TABLE 11

PERCENT FREQUENCY VS BY (NM) BY HOUR

HR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	6.8	9.1	36.4	47.7	44
06009	.0	4.3	4.3	.0	54.3	37.0	46
12015	.0	2.4	2.4	2.4	46.3	46.3	41
18021	.0	4.5	.0	2.3	52.3	40.9	44
TOT	0	5	6	6	83	75	175
PCT	.0	2.9	3.4	3.4	47.4	42.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VS BY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	2.7	10.8	37.8	35.1	27.0	37
06009	3.6	7.1	17.9	42.9	39.3	28
12015	3.1	6.3	40.6	43.8	15.6	32
18021	.0	.0	34.6	23.1	42.3	26
TOT	3	8	41	45	37	123
PCT	2.4	6.5	33.3	36.6	30.1	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
60/64	.0	.0	.6	.6	.0	.6	.0	.0	3	1.8
59/59	.0	.0	.0	.6	.6	.0	.0	.6	4	2.4
50/54	.0	.0	.0	1.8	1.2	6.5	7.1	7.6	41	24.1
45/49	.0	.0	.0	1.2	4.1	14.7	15.9	25.9	103	61.8
40/44	.0	.0	.0	.0	.6	2.4	2.4	4.7	17	10.0
TOTAL	0	0	1	7	11	42	43	66	170	100.0
PCT	.0	.0	.6	4.1	6.5	24.7	25.3	38.8		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
60/64	.6	.0	.0	.0	.0	.6	.0	.0	.0	.6
59/59	.4	.0	.0	.0	.0	.0	1.5	.4	.0	.0
50/54	3.7	.0	.0	.0	.4	2.8	10.4	6.8	.0	.0
45/49	4.7	2.1	1.5	1.6	3.7	3.1	19.3	25.9	.0	.0
40/44	.6	.0	.6	1.2	.0	1.0	5.3	1.3	.0	.0
TOTAL	10.0	2.1	2.1	2.8	4.1	7.5	36.5	34.4	.0	.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	61	57	53	47	41	38	37	47.1	272
06009	60	54	52	46	41	39	38	46.1	312
12015	62	55	53	47	41	39	36	47.2	256
18021	61	58	54	48	43	40	38	48.0	772
TOT	62	57	53	47	41	39	36	47.2	1812

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	7.0	7.0	30.2	25.6	30.2	82	43		
06009	.0	2.1	2.1	20.8	29.2	45.8	86	48		
12015	.0	8.6	8.6	25.7	25.7	31.4	82	35		
18021	.0	2.1	8.5	25.5	21.3	42.6	85	47		
TOT	0	8	11	44	44	66	84	173		

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PERIOD: (PRIMARY) 1904-1978
(OVER-ALL) 1870-1978

AREA 0025 MAGELLAN STRAIT WEST
53.8S 73.9W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41 44	45 48	49 52	53 56	57 60	61 64	TOT	N FOG	WD FPG
11/13	.0	.0	.0	.0	.6	.0	1	.0	.6
9/10	.0	.0	.0	.0	.0	.6	1	.0	.6
7/8	.0	.0	.0	.6	.0	.6	2	.0	1.2
6	.0	.0	1.9	.6	.0	.6	5	.0	3.1
5	.0	.0	.6	1.9	.6	.0	5	.0	3.1
4	.0	1.9	1.9	2.5	.0	.0	10	.0	6.2
3	.0	1.9	3.7	4.9	.0	.0	17	1.9	8.6
2	.0	4.3	1.2	.0	.0	.0	9	.0	5.6
1	.0	7.4	4.9	.6	.0	.0	21	1.9	11.1
0	.6	4.9	3.1	.0	.0	.0	14	1.2	7.4
-1	2.5	9.9	2.5	.6	.0	.0	25	.6	14.8
-2	.0	6.2	.0	.0	.0	.0	10	.0	6.2
-3	.0	6.2	1.2	.0	.0	.0	12	.6	6.8
-4	.6	3.7	.0	.0	.0	.0	7	.0	4.3
-5	1.2	3.1	.0	.0	.0	.0	7	.0	4.3
-6	1.2	2.5	.0	.0	.0	.0	6	.0	3.7
-7/-8	2.5	1.9	.6	.0	.0	.0	8	.0	4.9
-9/-10	1.2	.0	.0	.0	.0	.0	2	.0	1.2
TOTAL	16	87	35	19	2	3	162	10	152
PCT	9.9	53.7	21.6	11.7	1.2	1.9	100.0	6.2	93.8

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

N										NE									
HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT			1-3	4-10	11-21	22-33	34-47	48+	PCT			
41	.0	1.8	1.8	.0	.0	.0	3.5			.0	1.8	.0	.0	.0	.0	1.8			
1-2	.0	1.8	1.8	.0	.0	.0	3.5			.0	1.8	.0	.0	.0	.0	1.8			
3-4	.0	.0	.0	1.8	.0	.0	1.8			.0	.0	.0	.0	.0	.0	.0			
5-6	.0	.0	1.8	1.3	.0	.0	3.1			.0	.0	.0	.0	.0	.0	.0			
7	.0	.0	.0	.0	.0	.0	1.3			.0	.0	.0	.0	.0	.0	.0			
8-9	.0	.0	.0	3.1	.0	.0	3.1			.0	.0	.0	.0	.0	.0	.0			
10-11	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
12	.0	.0	.0	.0	1.8	.0	1.8			.0	.0	.0	.0	.0	.0	.0			
13-16	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
17-19	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
20-22	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
23-25	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
26-32	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
33-40	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
41-48	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
49-60	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
61-70	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
71-86	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
87+	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
TOT PCT	.0	3.5	6.6	6.1	1.8	.0	18.0			.0	3.5	.0	.0	.0	.0	3.5			

E										SE									
HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT			1-3	4-10	11-21	22-33	34-47	48+	PCT			
41	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
1-2	.0	.0	.0	.0	.0	.0	.0			.0	.0	.4	.0	.0	.0	.4			
3-4	.0	.0	1.8	.0	.0	.0	1.8			.0	.0	.0	.0	.0	.0	.0			
5-6	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
7	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
8-9	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
10-11	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
12	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
13-16	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
17-19	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
20-22	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
23-25	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
26-32	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
33-40	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
41-48	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
49-60	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
61-70	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
71-86	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
87+	.0	.0	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	.0			
TOT PCT	.0	.0	1.8	.0	.0	.0	1.8			.0	.0	.4	.0	.0	.0	.4			

PERIOD: (OVER-ALL) 1963-1978

FEBRUARY

AREA 0025 MAGELLAN STRAIT WEST
53.85 73.9W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							SW							PCT
	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	
<1	.0	.0	1.3	.0	.0	.0	1.3	.0	.0	.4	.0	.0	.0	.4	
1-2	.0	.0	1.3	.0	.0	.0	1.3	.0	1.8	1.8	.0	.0	.0	3.5	
3-4	.0	.0	1.8	.0	.0	.0	1.8	.0	.4	3.9	.0	.0	.0	4.4	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.8	.0	.0	.0	1.8	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	.0	4.4	.0	.0	.0	4.4	.0	2.2	7.9	.0	.0	.0	10.1	

HGT	W							NW							PCT	TOTAL PCT
	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT		
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1-2	.0	1.8	4.8	.0	.0	.0	6.6	.0	3.5	.4	.0	.0	.0	.0	3.9	
3-4	.0	3.1	1.3	.0	.0	.0	4.4	.0	.0	1.8	.0	.0	.0	.0	1.8	
5-6	.0	.0	6.6	.0	.0	.0	6.6	.0	.0	5.7	.4	.0	.0	.0	6.1	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.9	5.3	1.8	.0	.0	11.0	
8-9	.0	.0	.0	7.9	4.4	.0	12.3	.0	.0	.0	1.3	4.4	.0	.0	5.7	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	3.1	.0	.0	3.1	.0	.0	.0	.4	.0	.0	.0	.4	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	4.8	12.7	11.0	4.4	.0	32.9	.0	3.5	11.8	7.5	6.1	.0	28.9	100.0	

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT QBS
<1	.0	3.5	3.5	.0	.0	.0	7.0	
1-2	.0	10.5	10.5	.0	.0	.0	21.1	
3-4	.0	3.5	10.5	1.8	.0	.0	15.8	
5-6	.0	.0	15.8	1.8	.0	.0	17.5	
7	.0	.0	5.3	5.3	1.8	.0	12.3	
8-9	.0	.0	.0	12.3	8.8	.0	21.1	
10-11	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	3.5	1.8	.0	5.3	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	17.5	45.6	24.6	12.3	.0	100.0	57

PERIOD: (OVER-ALL) 1950-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT	
<6	.0	15.8	2.1	1.1	3.2	2.1	3.2	9.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	35	6
6-7	.0	1.1	3.2	.0	1.1	6.3	3.2	.0	.0	6.3	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	21	10
8-9	.0	.0	.0	.0	3.2	1.1	7.4	1.1	3.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	10
10-11	.0	.0	.0	.0	.0	.0	.0	2.1	.0	.0	2.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	16
12-13	.0	.0	.0	.0	.0	.0	1.1	.0	1.1	.0	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0	3	16
>13	.0	.0	.0	1.1	.0	1.1	.0	.0	2.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	11
INDET	5.3	1.1	2.1	2.1	.0	1.1	1.1	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	4
TOTAL	5	17	7	4	7	11	15	13	6	6	3	0	1	0	0	0	0	0	0	0	95	8
PCT	5.3	17.9	7.4	4.2	7.4	11.6	15.8	13.7	6.3	6.3	3.2	.0	1.1	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1902-1978
(OVER-ALL) 1865-1978

MARCH

AREA 0025 MAGELLAN STRAIT WEST
53.75 73.9W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	19.8	8.8	7.7	.0	.0	.0	.0	36.3	4.4	.0	.0	.0	2.2	.0	57.1
NE	11.4	11.4	11.4	.0	.0	.0	.0	34.3	.0	.0	.0	.0	.0	.0	65.7
E	17.4	.0	.0	.0	.0	.0	.0	17.4	17.4	.0	.0	.0	.0	.0	65.2
SE	23.5	.0	.0	.0	.0	.0	.0	23.5	.0	.0	.0	.0	.0	.0	76.5
S	.0	7.3	.0	.0	3.6	.0	3.6	14.5	7.3	.0	3.6	.0	.0	.0	74.5
SW	6.2	11.6	.0	.0	.0	.0	.0	17.8	2.7	.0	21.9	.0	.0	.0	57.5
W	8.7	20.6	.6	.0	.0	.0	.0	29.9	4.5	.0	2.6	.0	.0	1.9	61.1
NW	14.7	8.9	5.8	.0	.0	.0	.0	29.3	3.9	.0	3.1	.0	.8	3.9	59.1
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	10.3	12.3	2.8	.0	.4	.0	.4	26.2	4.4	.0	5.2	.0	.4	1.6	62.3
TOT OBS:	252														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00003	3.5	20.9	2.3	.0	.0	.0	.0	26.7	3.5	.0	3.5	.0	1.2	2.3	62.8
06009	8.5	8.5	3.4	.0	.0	.0	1.7	22.0	3.4	.0	5.1	.0	1.7	3.4	64.4
12015	17.0	7.5	5.7	.0	1.9	.0	.0	32.1	3.8	.0	3.8	.0	.0	1.9	58.5
18021	14.5	8.7	1.4	.0	.0	.0	.0	24.6	5.8	.0	7.2	.0	1.4	.0	60.9
TOT PCT TOT OBS:	10.1 267	12.4	3.0	.0	.4	.0	.4	26.2	4.1	.0	4.9	.0	1.1	1.9	51.8

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21	
N	.1	1.3	2.2	2.5	1.0	.3		7.3	23.1		3.9	.0	5.9	6.1	10.3	20.0	9.5	4.6
NE	.2	.9	.5	.6	.1	.0		2.3	14.9		3.5	.0	2.8	1.9	3.1	.0	1.9	1.0
E	.1	.7	.4	.2	.1	.0		1.5	11.5		.8	.0	1.9	2.2	1.6	.0	1.7	.8
SE	.2	1.0	.7	.4	.1	.0		2.4	13.5		2.0	.0	2.9	2.2	2.2	.0	2.4	3.1
S	.3	2.4	2.4	1.4	.5	.2		7.3	17.1		10.7	.0	7.9	4.9	6.5	.0	6.8	6.8
SW	.4	3.6	5.3	5.9	2.2	.9		18.4	22.1		18.2	45.0	14.7	19.3	22.2	.0	17.0	22.1
W	.5	4.8	9.7	10.8	4.6	1.2		31.6	23.0		30.3	30.0	30.1	32.7	30.1	25.0	33.3	30.6
NW	.3	3.4	8.2	9.6	5.7	1.1		28.2	24.6		29.2	25.0	33.3	29.6	29.2	55.0	26.5	30.6
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	.9							.9	.0		1.4	.0	.4	1.0	.8	.0	.9	.5
TOT OBS	52	325	528	562	254	65	1786		22.1		278	5	238	194	236	5	634	196
TOT PCT	2.9	18.2	29.6	31.5	14.2	3.6		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	06	12	18
N	.5	1.8	2.6	1.3	.9		7.3	23.1	3.8	6.0	10.5	8.4
NE	.5	.9	.6	.3	.0		2.3	14.9	3.4	2.4	3.0	1.7
E	.6	.7	.2	.1	.0		1.5	11.5	.8	2.0	1.6	1.5
SE	.6	.9	.7	.2	.0		2.4	13.5	1.9	2.6	2.2	2.5
S	1.2	2.5	2.2	1.0	.3		7.3	17.1	10.5	6.5	6.3	6.8
SW	1.8	4.7	6.0	4.0	1.8		18.4	22.1	18.6	16.8	21.8	18.2
W	2.1	7.8	11.2	7.4	3.1		31.6	23.0	30.3	31.3	30.0	32.7
NW	1.2	6.2	9.5	6.1	3.2		28.2	24.6	29.2	31.7	23.9	27.4
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	.9						.9	.0	1.4	.7	.8	.8
TOT OBS	168	454	591	406	167	1786		22.1	283	432	241	830
TOT PCT	9.4	25.4	33.1	22.7	9.4		100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1902-1978
(OVER-ALL) 1865-1978

MARCH

AREA 0025 MAGELLAN STRAIT WEST
53.75 73.9W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)					48+	MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47				
00603	1.4	2.5	21.6	31.8	31.1	10.2	1.4	19.8	100.0	283
06609	.7	1.6	19.7	29.6	28.5	16.9	3.0	22.1	100.0	432
12615	.8	1.7	17.0	34.0	30.3	11.6	4.6	21.8	100.0	241
18621	.8	2.2	16.6	27.5	33.5	14.9	4.3	22.9	100.0	830
TOT	16	36	325	528	562	234	63	22.1		1786
PCT	.9	2.0	18.2	29.6	31.5	14.2	3.6		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.6	1.1	2.2	5.9		6.7
NE	.0	.2	.6	2.2		7.3
E	.0	.0	.6	1.1		7.6
SE	.0	.0	.6	.7		7.2
S	.0	.5	4.2	3.4		6.8
SW	.9	1.6	3.9	6.3		6.5
W	3.3	4.2	11.6	12.0		5.9
NW	.8	1.9	12.5	16.4		6.8
VAR	.0	.0	.0	.0		7.0
CALM	.0	.0	.0	.6		7.5
TOT OBS	9	15	59	77	160	
TOT PCT	5.6	9.4	36.9	48.1	100.0	6.5

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
.0	.5	.6	.5	1.7	2.7	.5	.0	.0	.0	.0	3.4
.0	.0	1.3	.6	.8	.0	.2	.0	.0	.0	.0	.2
.0	1.1	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.5	.0	.0	.5	1.9	1.3	3.0	.0	.0	.0	.0	1.1
.2	1.4	1.4	.3	3.6	2.5	.8	.0	.0	.0	.0	2.5
.0	1.7	3.0	4.8	4.5	5.6	.0	.0	.0	.0	.0	11.4
1.9	1.4	1.9	5.2	4.4	5.5	.0	.6	.0	.6	.0	10.2
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.6	.6	.0	.0	.0	.0	.0	.0	.0	.0
.4	11	14	20	28	28	7	1	0	1	.46	160
2.5	6.9	8.8	12.5	17.5	17.5	4.4	.6	.0	.6	28.8	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.6	.6	.6	.6	.6	.6	.6	.6
>5000	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
>3500	2.9	5.2	5.2	5.2	5.2	5.2	5.2	5.2
>2000	13.9	20.2	22.0	22.0	22.0	22.0	22.0	22.0
>1000	19.1	33.5	39.9	40.5	40.5	40.5	40.5	40.5
>600	22.0	40.5	50.3	52.0	52.0	52.0	52.0	52.0
>300	24.9	46.8	56.6	60.1	61.3	61.3	61.3	61.3
>150	25.4	49.1	63.6	67.6	68.8	68.8	68.8	68.8
>0	26.0	50.3	64.7	68.8	71.1	71.7	71.7	71.7
TOTAL	45	87	112	119	123	124	124	124

TOTAL NUMBER OF OBS: 173

PCT FREQ NH <5/8: 28.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
3.3	4.4	8.3	6.1	5.6	5.6	17.8	10.6	36.1	2.2	180

PERIOD: (PRIMARY) 1902-1978
(OVER-ALL) 1865-1978

MARCH

TABLE 8

AREA 0025 MAGELLAN STRAIT WEST
53.75 73.9W

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VISBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
1/2<1	PCP	.4	.0	.0	.0	.0	.0	.2	1.9	.0	.0	2.6	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.9	
	TOT %	.4	.0	.0	.0	.0	.0	.2	2.8	.0	.0	3.5	
1<2	PCP	.0	.0	.0	.0	.0	.1	1.8	.2	.0	.0	2.2	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.1	1.8	.2	.0	.0	2.2	
2<5	PCP	1.3	1.1	.4	.4	.0	.5	1.9	2.5	.0	.0	8.2	
	NO PCP	.4	.0	.0	.0	.0	.4	2.1	1.8	.0	.0	4.8	
	TOT %	1.7	1.1	.4	.4	.0	1.0	4.0	4.3	.0	.0	13.0	
5<10	PCP	1.3	.2	.4	.0	1.7	2.2	2.7	2.7	.0	.0	11.3	
	NO PCP	1.7	1.3	1.7	.4	4.4	6.3	11.0	8.5	.0	.4	35.9	
	TOT %	3.0	1.5	2.2	.4	6.2	8.4	13.7	11.3	.0	.4	47.2	
10+	PCP	.4	.0	.0	.0	.0	.0	.8	.1	.0	.0	1.3	
	NO PCP	4.1	.8	.3	.1	4.4	5.8	8.3	7.7	.0	.9	32.5	
	TOT %	4.5	.8	.3	.1	4.4	5.8	9.1	7.8	.0	.9	33.8	
TOT OBS													231
TOT PCT		9.7	3.4	2.9	1.0	10.6	15.4	28.9	26.8	.0	1.3	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VISBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.8	
	11-21	.0	.0	.0	.0	.0	.0	.2	.6	.0	.0	.8	
	22+	.4	.0	.0	.0	.0	.0	1.6	.0	.0	.0	2.0	
	TOT %	.4	.0	.0	.0	.0	.0	.2	3.0	.0	.0	3.7	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.1	.7	.0	.0	.0	.8	
	22+	.0	.0	.0	.0	.0	.0	1.3	.3	.0	.0	1.6	
	TOT %	.0	.0	.0	.0	.0	.1	2.0	.3	.0	.0	2.4	
2<5	0-3	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.4	
	4-10	.0	.4	.4	.0	.0	.0	.4	.8	.0	.0	2.0	
	11-21	.5	.2	.0	.4	.0	.4	.9	.8	.0	.0	3.3	
	22+	1.1	.4	.0	.0	.0	.5	2.2	3.5	.0	.0	7.7	
	TOT %	1.6	1.0	.4	.4	.0	.9	4.0	5.1	.0	.0	13.4	
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4	
	4-10	.4	.4	.8	.4	2.5	1.5	1.0	1.0	.0	.0	8.1	
	11-21	.3	.4	.8	.0	2.4	3.0	4.7	3.4	.0	.0	15.0	
	22+	2.3	.6	.4	.0	.8	3.6	7.8	6.4	.0	.0	22.0	
	TOT %	3.0	1.4	2.0	.4	5.8	8.1	13.5	10.8	.0	.4	45.5	
10+	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.8	
	4-10	2.2	.1	.3	.1	.2	.8	3.4	1.4	.0	.0	8.5	
	11-21	1.4	.6	.0	.0	2.2	3.6	3.7	3.2	.0	.0	14.6	
	22+	.6	.0	.0	.0	1.9	1.9	3.4	2.7	.0	.0	10.6	
	TOT %	4.2	.7	.3	.1	4.4	6.3	10.4	7.3	.0	.8	34.6	
TOT OBS													246
TOT PCT		9.3	3.2	2.7	.9	10.2	15.4	30.1	26.9	.0	1.2	100.0	

PERIOD: (PRIMARY) 1902-1978
(OVER-ALL) 1865-1978

MARCH

AREA 0025, MAGELLAN STRAIT WEST
53.75 73.9W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET) NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HR	000	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
(GMT)	149	299	599	999	1999	3499	4999	6499	7999				
00003	3.8	7.7	9.6	11.5	23.1	15.4	1.9	.0	.0	.0	73.1	26.9	52
06009	2.7	8.1	8.1	8.1	18.9	13.5	5.4	.0	.0	.0	64.9	35.1	37
12015	2.5	7.5	10.0	15.0	15.0	15.0	5.0	.0	.0	.0	70.0	30.0	40
18021	2.2	6.7	6.7	13.3	15.6	22.2	4.4	2.2	.0	2.2	75.6	24.4	45
TOT	5	13	15	21	32	29	7	1	0	1	124	50	174
PCT	2.9	7.5	8.6	12.1	18.4	16.7	4.0	.6	.0	.6	71.3	28.7	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL
(GMT)							OBS
00003	1.5	1.5	3.0	10.6	45.5	37.9	66
06009	.0	3.1	1.6	14.1	48.4	32.8	64
12015	.0	1.8	5.4	12.5	50.0	30.4	56
18021	.0	6.7	2.7	14.7	38.7	37.3	75
TOT	1	9	8	34	118	91	261
PCT	.4	3.4	3.1	13.0	45.2	34.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET) NM >4/8) BY HOUR

HR	<150	<600	<1000	1000+	NM <5/8 AND 5+	TOTAL
(GMT)	<50YD	<1	<5	AND 5+		OBS
00003	3.8	21.2	38.5	34.6	26.9	52
06009	2.8	19.4	38.9	33.3	27.8	36
12015	2.5	22.5	45.0	27.5	27.5	40
18021	2.2	15.6	37.8	37.8	24.4	45
TOT	5	34	69	58	46	173
PCT	2.9	19.7	39.9	33.5	26.6	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL	PCT
									OBS	FREQ
55/59	.0	.0	.0	.0	.5	.5	.0	.5	3	1.4
50/54	.0	.0	.0	.9	3.6	1.4	4.1	5.5	34	15.5
45/49	.0	.0	.0	2.3	7.7	12.3	11.8	17.3	113	51.4
40/44	.0	.0	.0	.5	5.9	6.8	9.1	5.5	61	27.7
35/39	.0	.0	.0	.0	2.7	.5	.9	.9	9	4.1
TOTAL	0	0	0	8	39	52	56	65	220	100.0
PCT	.0	.0	.0	3.6	17.7	23.6	25.5	29.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
55/59	.0	.0	.3	.1	.0	.1	.3	.5	.0	.0
50/54	2.0	2.5	.5	.0	.8	.2	3.2	5.8	.0	.5
45/49	3.8	.1	.9	1.4	2.6	5.6	18.5	17.2	.0	1.4
40/44	.9	.5	1.4	.0	6.6	8.4	7.7	2.3	.0	.0
35/39	.0	.0	.0	.0	3.2	.0	.9	.0	.0	.0
TOTAL	6.7	3.1	3.1	1.5	13.2	14.3	30.7	25.7	.0	1.8

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL
(GMT)									OBS
00003	55	54	52	46	40	36	35	46.3	282
06009	57	53	51	46	38	35	34	45.9	429
12015	56	54	51	46	39	36	34	45.9	237
18021	57	55	52	46	40	36	33	46.4	805
TOT	57	54	52	46	40	36	33	46.2	1753

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL
(GMT)										OBS
00003	.0	8.0	24.0	26.7	22.7	18.7	77	75		
06009	.0	1.8	10.9	29.1	21.8	36.4	84	55		
12015	.0	.0	10.9	17.4	39.1	32.6	85	46		
18021	.0	1.7	20.7	22.4	27.6	27.6	82	58		
TOT	0	8	41	57	63	65	81	234		

PERIOD: (PRIMARY) 1902-1978
(OVER-ALL) 1865-1978

MARCH

AREA 0025 MAGELLAN STRAIT WEST
59.7S 73.9W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37 40	41 44	45 48	49 52	53 56	TOT	W FOG	NO FOG
9/10	.0	.0	.0	.0	.4	1	.0	.4
7/8	.0	.0	.4	.0	.4	2	.0	.8
6	.0	.0	.0	.0	.4	1	.0	.4
5	.0	.4	.0	.0	.4	2	.0	.8
4	.0	.0	.4	3.3	.4	10	.0	4.1
3	.0	.0	.0	2.9	1.2	10	.0	4.1
2	.0	.0	2.5	4.5	.0	17	.0	7.0
1	.0	1.2	4.1	3.7	.4	23	.0	9.5
0	.0	1.2	8.7	2.9	.4	32	.4	12.8
-1	.4	3.3	7.9	2.9	.0	35	.8	13.6
-2	.8	5.4	6.2	1.7	.0	34	2.5	11.6
-3	.0	2.9	2.9	1.2	.0	17	.0	7.0
-4	1.7	3.3	2.1	.0	.0	17	.8	6.2
-5	.8	4.1	2.5	.0	.0	18	.0	7.4
-6	.4	2.5	.4	.0	.0	8	.0	3.3
-7/-8	1.2	2.9	.4	.0	.0	11	.0	4.5
-9/-10	1.2	.4	.0	.0	.0	4	.0	1.7
TOTAL	16	67	93	56	10	242	11	231
PCT	6.6	27.7	38.4	23.1	4.1	100.0	4.5	95.5

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	3.0	.0	1.3	.0	.0	.0	.0	1.3
1-2	.0	1.9	.0	.0	.0	.0	1.9	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.8	1.9	.0	.0	2.7	.0	.0	.3	1.1	.0	.0	1.3
5-6	.0	.0	.0	1.1	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	1.1	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.8	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	4.8	.8	4.8	.0	.0	10.5	.0	1.3	.3	1.1	.0	.0	2.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	1.1	.0	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	1.1	.0	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0

PERIOD: (OVER-ALL) 1963-1978

MARCH

AREA 0025 MAGELLAN STRAIT WEST
53.75 73.9W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.8	.0	.0	.0	.0	.8	.0	1.2	.0	.0	.0	.0	1.2	
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.3	1.3	.0	.0	.0	1.6	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.0	.0	1.1	
5-6	.0	.0	1.1	.0	.0	.0	1.1	.0	.0	.0	.3	.0	.0	.3	
7	.0	.0	.8	3.0	.0	.0	3.8	.0	.0	2.4	3.5	.0	.0	5.9	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.0	.0	1.1	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.0	1.1	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	.8	1.9	3.0	.0	.0	5.6	.0	1.6	5.9	5.4	.3	.0	13.2	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	1.1	.0	.0	.0	.0	1.1	.0	2.2	.0	.0	.0	.0	2.2	
1-2	.0	1.9	1.6	.0	.0	.0	3.5	.0	1.3	2.4	.0	.0	.0	3.8	
3-4	.0	1.1	4.3	3.8	.0	.0	9.1	.0	1.1	5.4	1.9	.0	.0	8.3	
5-6	.0	.0	4.8	3.0	.8	.0	8.6	.0	1.1	1.8	4.3	.0	.0	7.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.2	.0	.0	3.2	
8-9	.0	.0	.0	1.6	.0	.0	1.6	.0	.0	.0	1.6	.0	.0	1.6	
10-11	.0	.0	2.2	2.4	.0	.0	4.6	.0	.0	.0	1.3	.0	.0	1.3	
12	.0	.0	.0	.8	.0	.0	.8	.0	.0	.0	1.3	.0	.0	1.3	
13-16	.0	.0	1.1	4.0	.0	.0	5.1	.0	.0	.0	3.5	.0	.0	3.5	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	4.0	14.0	15.6	.8	.0	34.4	.0	3.6	9.4	17.5	.0	.0	32.5	100.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	.0	9.4	1.0	.0	.0	.0	10.4	
1-2	2.1	6.3	5.2	.0	.0	.0	13.5	
3-4	.0	2.1	11.5	8.3	.0	.0	21.9	
5-6	.0	1.0	7.3	8.3	1.0	.0	17.7	
7	.0	.0	3.1	10.4	.0	.0	13.5	
8-9	.0	.0	1.0	3.1	.0	.0	4.2	
10-11	.0	.0	2.1	4.2	.0	.0	6.3	
12	.0	.0	.0	3.1	.0	.0	3.1	
13-16	.0	.0	1.0	7.3	.0	.0	8.3	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	1.0	.0	.0	1.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	2.1	16.8	32.3	45.8	1.0	.0	100.0	96

PERIOD: (OVER-ALL) 1950-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	6.4	9.3	9.3	10.7	2.1	1.4	.0	.7	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	57	4
6-7	.0	.0	1.4	1.4	1.4	2.1	4.3	1.4	4.3	2.1	1.4	.7	.0	.0	.0	.0	.0	.0	.0	29	11
8-9	.0	.7	1.4	3.6	4.3	1.4	3.6	2.9	2.1	.7	.7	2.1	.0	.0	.0	.0	.0	.0	.0	33	10
10-11	.0	.0	.0	.0	.7	.7	.7	1.4	.0	.0	.7	.7	.0	.0	.0	.0	.0	.0	.0	7	13
12-13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	
>13	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	3	11
INDET	3.6	.0	.0	.7	.7	.0	.7	.0	1.4	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	6
TOTAL	14	14	17	24	14	8	13	9	12	5	5	5	0	0	0	0	0	0	0	140	8
PCT	10.0	10.0	12.1	17.1	10.0	5.7	9.3	6.4	8.6	3.6	3.6	3.6	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1903-1977
(OVER-ALL) 1870-1977

APRIL

AREA 0025 MAGELLAN STRAIT WEST
53.8S 73.8W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	BLWG DUST	NO SIG WEA
N	33.3	9.9	3.7	.0	.0	.0	.0	43.2	.0	.0	19.8	.0	.0	.0	37.0
NE	36.4	.0	36.4	.0	.0	.0	.0	72.7	.0	.0	9.1	.0	.0	.0	18.2
E	41.4	.0	17.2	.0	.0	.0	.0	58.6	.0	.0	17.2	.0	.0	.0	24.1
SE	15.9	4.5	2.3	.0	.0	.0	.0	22.7	4.5	.0	9.1	.0	.0	.0	63.6
S	2.4	2.4	.0	.0	.0	.0	2.4	7.3	.0	.0	26.8	.0	.0	.0	65.9
SW	8.1	6.3	.0	.0	3.8	.0	2.5	20.6	1.9	.0	37.5	.0	.0	.0	40.0
W	16.9	6.5	.0	.0	1.3	.0	1.3	26.0	9.7	.0	16.9	.0	.0	.0	47.4
NW	14.2	14.2	3.2	.0	2.6	.0	2.6	36.1	6.5	.0	10.3	.0	.0	.0	47.1
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	16.7	6.9	3.4	.0	1.5	.0	1.5	29.6	3.9	.0	19.7	.0	.0	.0	46.8
TOT OBS:	203														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	BLWG DUST	NO SIG WEA
00&03	18.2	9.1	.0	.0	.0	.0	.0	27.3	9.1	.0	18.2	.0	.0	.0	45.5
06&09	15.9	1.6	4.8	.0	1.6	.0	1.6	25.4	1.6	.0	22.2	.0	.0	.0	50.8
12&15	18.4	7.9	7.9	.0	.0	.0	.0	34.2	7.9	.0	18.4	.0	.0	.0	39.5
18&21	14.9	9.5	1.4	.0	2.7	.0	2.7	29.7	1.4	.0	20.3	.0	.0	.0	48.6
TOT PCT	16.3	6.7	3.4	.0	1.4	.0	1.4	28.8	3.8	.0	20.2	.0	.0	.0	47.1
TOT OBS:	208														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.2	1.7	2.6	1.7	1.2	.5		7.9	21.8		8.3	.0	9.6	7.3	5.6	.0	8.5	7.6
NE	.1	1.1	1.3	.7	.2	*		3.5	10.1		3.3	.0	3.2	4.8	4.7	.0	2.9	3.1
E	.3	1.6	1.5	.4	.1	.0		3.9	12.3		3.6	.0	3.4	2.5	5.3	.0	3.9	4.9
SE	.1	1.8	1.9	.5	.4	.1		4.9	15.6		6.4	50.0	4.7	5.3	4.8	50.0	4.1	4.9
S	.5	3.0	2.5	1.3	.8	.2		8.3	16.8		6.6	50.0	7.6	9.7	9.4	.0	7.9	9.4
SW	.2	4.8	5.3	6.1	3.0	1.3		20.7	22.6		21.1	.0	18.3	17.6	19.5	50.0	22.5	22.2
W	.5	3.4	7.1	8.8	4.5	1.5		25.9	24.7		25.7	.0	25.6	24.3	26.7	.0	27.2	21.2
NW	.7	2.6	6.5	7.1	5.7	1.2		23.8	25.4		24.3	.0	25.5	26.3	20.8	.0	22.5	25.9
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.2							1.2	.0		.8	.0	2.1	2.3	1.3	.0	.7	.9
TOT OBS	65	346	494	459	274	82	1720		22.0		236	1	235	220	236	2	579	211
TOT PCT	3.8	20.1	28.7	26.7	15.9	4.8		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)				TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40				00	06	12	18
N	.9	2.6	2.0	1.2	1.2	7.9	21.8	8.2	8.5	5.6	8.2
NE	.4	1.5	1.1	.4	*	3.5	10.1	3.3	4.0	4.6	2.9
E	1.0	2.1	.6	.3	.0	3.9	12.3	3.6	3.0	5.3	4.1
SE	.9	2.5	.8	.6	.1	4.9	15.6	6.5	5.0	5.1	4.3
S	1.2	3.5	2.0	1.1	.4	8.3	16.8	6.6	8.6	9.3	8.3
SW	1.7	6.3	5.7	4.7	2.3	20.7	22.6	21.0	18.0	19.7	22.4
W	1.7	4.7	9.6	6.5	3.5	25.9	24.7	25.6	25.0	28.5	25.6
NW	1.4	4.4	8.2	6.3	3.5	23.8	25.4	24.2	25.9	20.6	23.4
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.2					1.2	.0	.8	2.2	1.3	.8
TOT OBS	178	475	515	362	190	1720		237	455	238	790
TOT PCT	10.3	27.6	29.9	21.0	11.0		100.0	100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1903-1977
(OVER-ALL) 1870-1977

APRIL

AREA 0025 MAGELLAN STRAIT WEST
53.8S 73.8W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)							PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47	48+	MEAN		
00L03	.8	3.0	24.1	31.6	23.2	11.8	5.5	20.4	100.0	237
06L09	2.2	3.1	19.6	25.9	28.4	14.5	6.4	22.3	100.0	455
12L15	1.3	2.9	24.8	24.8	25.6	15.5	5.0	21.4	100.0	238
18L21	.8	2.0	17.8	30.6	27.1	18.1	3.5	22.5	100.0	790
TOT	21	44	346	494	459	274	82	22.0		1720
PCT	1.2	2.6	20.1	28.7	26.7	15.9	4.8	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	.0	.0	1.4	6.9		7.4
NE	1.4	.0	.0	.0		2.0
E	.0	.0	.0	1.4		8.0
SE	.0	.0	2.2	10.9		7.6
S	1.1	.0	1.8	6.5		7.0
SW	1.4	2.5	6.2	6.5		5.8
W	1.8	1.8	4.7	12.0		6.6
NW	4.3	4.3	6.9	9.4		5.7
VAR	.0	.0	.0	.0		.0
CALM	.0	1.4	.0	2.9		6.3
TOT OBS	7	7	16	39	69	6.4
TOT PCT	10.1	10.1	23.2	56.5	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH ANY HGT	<5/8 TOTAL OBS
.0	.0	.0	4.0	2.9	.0	.0	.0	.0	.0	.0	1.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4
.0	.0	.0	.0	1.4	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	10.1	1.4	.0	1.4	.0	.0	.0	.0
.0	.0	.0	.0	6.9	1.4	.0	.0	.0	.0	.0	1.1
.0	.0	2.2	2.9	3.3	.0	1.4	1.4	.0	.0	.0	5.4
.0	.0	4.7	2.2	5.1	.0	.0	2.2	.0	.0	.0	6.2
.0	.0	.4	4.0	8.0	.0	2.9	.7	.0	.0	.0	9.1
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	2.9	.0	.0	.0	.0	.0	1.4
.0	.0	5	9	26	4	3	4	.0	.0	.0	18
.0	.0	7.2	13.0	37.7	5.8	4.3	5.8	.0	.0	.0	69
											100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.0	.0	.0	.0	.0	.0	.0	.0
= OR >5000	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
= OR >3500	7.0	8.5	11.3	11.3	11.3	11.3	11.3	11.3
= OR >2000	12.7	15.5	18.3	18.3	18.3	18.3	18.3	18.3
= OR >1000	40.8	49.3	53.5	54.9	54.9	54.9	54.9	54.9
= OR >600	47.9	59.2	64.8	67.6	67.6	67.6	67.6	67.6
= OR >300	47.9	64.8	70.4	73.2	73.2	73.2	74.6	74.6
= OR >150	47.9	64.8	70.4	73.2	73.2	73.2	74.6	74.6
= OR >0	47.9	64.8	70.4	73.2	73.2	73.2	74.6	74.6
TOTAL	34	46	50	52	52	52	53	53

TOTAL NUMBER OF OBS: 71

PCT FREQ NH <5/8: 25.4

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
2.6	3.9	6.5	10.4	1.3	5.2	10.4	15.6	44.2	.0	77

PERIOD: (PRIMARY) 1903-1977
(OVER-ALL) 1870-1977

APRIL

AREA 0025, MAGELLAN STRAIT WEST
59.85 73.8W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VISBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.4	.1	.0	.0	.5	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.4	.1	.0	.0	.5	
1/2<1	PCP	.0	.0	1.2	.2	.0	.0	.0	.0	.0	.0	1.5	
	NO PCP	.2	.0	.5	.0	.0	.0	.0	.2	.0	.0	1.0	
	TOT %	.2	.0	1.7	.2	.0	.0	.0	.2	.0	.0	2.5	
1<2	PCP	1.0	.0	.5	.5	.0	.7	.7	.0	.0	.0	3.4	
	NO PCP	.0	.0	.2	.2	.0	.0	.5	.0	.0	.0	1.0	
	TOT %	1.0	.0	.7	.7	.0	.7	1.2	.0	.0	.0	4.4	
2<5	PCP	1.4	1.0	1.0	1.2	.2	.2	.2	1.6	.0	.0	6.9	
	NO PCP	.0	.0	.5	.0	.0	.5	.5	.0	.0	.0	2.0	
	TOT %	1.4	1.0	1.5	1.2	.2	.7	.7	2.1	.0	.0	8.9	
5<10	PCP	2.0	1.0	1.0	.5	.5	3.1	3.6	4.2	.0	.0	15.8	
	NO PCP	3.4	.2	1.2	2.0	6.2	10.6	10.0	5.8	.0	.5	39.9	
	TOT %	5.4	1.2	2.2	2.5	6.7	13.7	13.5	10.0	.0	.5	55.7	
10+	PCP	.0	.0	.5	.0	.0	.0	.0	1.0	.0	.0	1.5	
	NO PCP	2.0	.5	.5	6.2	3.2	4.6	3.1	5.7	.0	1.0	26.6	
	TOT %	2.0	.5	1.0	6.2	3.2	4.6	3.1	6.7	.0	1.0	28.1	
TOT OBS													203
TOT PCT		10.0	2.7	7.1	10.8	10.1	19.7	19.0	19.1	.0	1.5	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VISBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.3	.6	.0	.0	.9	
	TOT %	.0	.0	.0	.0	.0	.0	.3	.6	.0	.0	.9	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	1.1	.2	.0	.0	.0	.0	.0	.0	1.3	
	11-21	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.4	
	22+	.2	.0	.0	.0	.0	.0	.0	.7	.0	.0	.9	
	TOT %	.2	.0	1.6	.2	.0	.0	.0	.7	.0	.0	2.7	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.4	.0	.2	.2	.0	.0	.0	.9	
	11-21	.9	.0	.7	.2	.0	.0	.0	.0	.0	.0	1.8	
	22+	.0	.0	.0	.0	.0	.4	.9	.0	.0	.0	1.3	
	TOT %	.9	.0	.7	.2	.0	.7	1.1	.0	.0	.0	4.0	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.4	.4	.9	.7	.2	.0	.0	.9	.0	.0	3.6	
	11-21	.3	.4	.4	.4	.0	.4	.0	.1	.0	.0	2.2	
	22+	.4	.0	.0	.0	.0	.7	.7	.9	.0	.0	2.7	
	TOT %	1.2	.9	1.3	1.1	.2	1.1	.7	1.9	.0	.0	8.4	
5<10	0-3	.0	.0	.0	.0	.4	.0	.4	.0	.0	.4	1.3	
	4-10	1.1	1.1	.9	.7	3.1	6.7	.2	.4	.0	.0	14.2	
	11-21	2.0	.0	1.1	1.6	1.1	2.9	4.9	3.8	.0	.0	17.3	
	22+	1.8	.0	.0	.0	1.3	3.0	7.3	5.2	.0	.0	18.7	
	TOT %	4.9	1.1	2.0	2.2	6.0	12.6	12.9	9.4	.0	.4	51.6	
10+	0-3	.0	.0	.0	.0	.0	.0	.3	1.0	.0	1.3	2.7	
	4-10	.9	.0	.0	1.3	1.6	1.8	1.8	2.4	.0	.0	9.8	
	11-21	.0	.0	.9	1.1	.4	2.4	1.1	1.6	.0	.0	7.6	
	22+	.9	.4	.0	3.1	1.3	2.3	1.9	2.4	.0	.0	12.4	
	TOT %	1.8	.4	.9	5.6	3.3	6.6	5.1	7.4	.0	1.3	32.4	
TOT OBS													225
TOT PCT		9.0	2.4	6.4	9.8	9.6	20.9	20.1	20.0	.0	1.8	100.0	

APRIL

PERIOD: (PRIMARY) 1903-1977
(OVER-ALL) 1870-1977

TABLE 10

AREA 0025 MAGELLAN STRAIT WEST
53.8S 73.8WPERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOURL (GMT)	0/0	1/0	3/0	6/0	10/0	20/0	35/0	50/0	65/0	80/0+	TOTAL	NM <3/8 ANY HGT	TOTAL OBS
00003	.0	.0	.0	20.0	46.7	6.7	.0	13.3	.0	.0	86.7	13.3	15
06009	.0	.0	5.3	10.5	31.6	5.3	5.3	10.5	.0	.0	68.4	31.6	19
12015	.0	.0	13.3	20.0	33.3	.0	6.7	.0	.0	.0	73.3	26.7	15
18021	.0	.0	8.7	4.3	34.8	13.0	8.7	.0	.0	.0	69.6	30.4	23
TOT	0	0	5	9	26	5	4	4	0	0	53	19	72
PCT	.0	.0	6.9	12.5	36.1	6.9	5.6	5.6	.0	.0	73.6	26.4	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	8.6	2.9	45.7	42.9	35
06009	.0	2.8	1.4	8.3	48.6	38.9	72
12015	.0	2.4	.0	16.7	59.5	21.4	42
18021	2.5	3.7	6.2	7.4	51.9	28.4	81
TOT	2	6	9	20	118	75	230
PCT	.9	2.6	3.9	8.7	51.3	32.6	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOURL (GMT)	<150 450YD	<600 41	<1000 45	1000+ AND 5+	NM <3/8 AND 5+	TOTAL OBS
00003	.0	.0	20.0	66.7	13.3	15
06009	.0	5.3	15.8	52.6	31.6	19
12015	.0	13.3	46.7	26.7	26.7	15
18021	.0	9.1	22.7	50.0	27.3	22
TOT	0	5	18	35	18	71
PCT	.0	7.0	25.4	49.3	25.4	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
50/54	.0	.0	.0	.4	.8	.4	1.6	1.2	11	4.4
45/49	.0	.0	.0	.0	.8	7.1	12.7	15.9	94	37.3
40/44	.0	.0	.0	.0	2.0	8.7	20.6	13.9	114	45.2
35/39	.0	.0	.0	.0	.8	4.4	5.6	2.4	33	13.1
TOTAL	0	0	0	3	11	52	102	84	252	100.0
PCT	.0	.0	.0	1.2	4.4	20.6	40.5	33.3		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
50/54	.7	.0	.0	.0	.0	1.0	.5	2.2	.0	.0
45/49	4.7	3.9	3.1	2.2	1.6	11.4	4.9	7.6	.0	1.6
40/44	5.6	3.2	7.3	6.0	4.4	8.1	6.9	3.8	.0	.0
35/39	.0	.4	.5	1.7	5.2	3.2	1.8	.0	.0	.4
TOT	10.9	3.9	10.9	9.8	11.1	23.7	14.1	13.6	.0	2.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	54	52	50	44	39	37	34	44.3	238
06009	53	52	50	44	37	35	34	43.7	457
12015	55	52	50	43	37	36	33	43.3	236
18021	57	53	50	44	38	35	34	44.2	776
TOT	57	52	50	44	38	35	33	44.0	1707

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	2.3	4.7	30.2	44.2	18.6	82	43		
06009	.0	.0	6.5	16.9	37.7	39.0	85	77		
12015	.0	.0	2.3	20.5	45.5	31.8	85	44		
18021	.0	2.1	4.3	19.1	40.4	34.0	84	96		
TOT	0	3	12	53	106	84	84	238		

PERIOD: (PRIMARY) 1903-1977
(OVER-ALL) 1870-1977

APRIL

AREA 0025 MAGELLAN STRAIT WEST
53.85 73.8W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	33 36	37 40	41 44	45 48	49 52	53 56	TOT	N FOG	NO FOG
9/10	.0	.0	.0	.0	.0	.6	1	.0	.6
5	.0	.0	.0	.0	1.2	.0	2	.0	1.2
4	.0	.6	.0	1.2	.0	.0	3	.0	1.8
3	.0	.0	.0	1.8	.0	1.2	5	.0	3.1
2	.0	.0	.0	3.1	1.2	.0	7	1.8	2.9
1	.0	.0	.0	10.4	1.2	.0	19	2.5	9.2
0	.0	.0	3.1	6.1	.0	.0	16	1.8	8.0
-1	.0	.0	9.8	2.5	.0	.0	21	3.1	9.8
-2	.0	1.2	10.4	4.3	3.1	.0	31	4.3	14.7
-3	.0	2.5	1.8	1.8	.0	.0	10	2.5	3.7
-4	.0	2.5	1.8	3.1	.0	.0	13	1.2	6.7
-5	.6	6.1	3.7	1.2	.0	.0	19	1.2	10.4
-6	.0	2.5	.0	.6	.0	.0	5	.6	2.5
-7/-8	.0	3.7	1.2	1.2	.0	.0	10	.0	6.1
-9/-10	.0	.6	.0	.0	.0	.0	1	.0	.6
TOTAL	1		52		14		163	31	132
PCT		.6	19.6	31.9	37.4	8.6	100.0	19.0	81.0

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	5.7	.0	.0	.0	.0	5.7	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	2.9	.0	.0	2.9	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	2.9	2.9	.0	5.7	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	5.7	.0	5.7	2.9	.0	14.3	.0	.0	.0	.0	.0	.0	.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	2.9	.0	.0	.0	.0	2.9	.0	2.9	.0	.0	.0	.0	2.9
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.9	.0	.0	.0	.0	2.9	.0	2.9	.0	.0	.0	.0	2.9

PERIOD: (OVER-ALL) 1963-1977

APRIL

TABLE 18 (CONT)

AREA 0025 MAGELLAN STRAIT WEST
53.85 73.8W

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	2.9	.0	.0	.0	.0	2.9	
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.9	.0	.0	.0	2.9	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.3	.0	.0	9.3	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	2.9	2.9	.7	.7	.0	7.1	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.9	.0	2.9	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	5.7	5.7	10.7	3.6	.0	25.7	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1-2	.0	.0	.0	.0	.0	.0	.0	.0	2.9	2.9	.0	.0	.0	5.7	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	2.9	.0	.0	.0	.0	2.9	
5-6	.0	.0	.0	2.1	.0	.0	2.1	.0	.0	2.9	.0	.0	.0	2.9	
7	.0	.0	.0	.0	.0	.0	.0	.0	2.9	.0	2.9	2.9	.0	8.6	
8-9	.0	.0	.0	2.1	2.1	.0	4.3	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	2.1	.0	2.1	.0	.0	.0	5.7	.7	.0	6.4	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	5.7	.0	.0	5.7	.0	.0	.0	.0	2.9	.0	2.9	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	5.7	2.1	.0	.0	7.9	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	.0	5.7	12.1	4.3	.0	22.1	.0	8.6	5.7	8.6	6.4	.0	29.3	97.1

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	2.9	2.9	.0	.0	.0	.0	5.7	
1-2	.0	14.3	2.9	.0	.0	.0	17.1	
3-4	.0	2.9	2.9	.0	.0	.0	5.7	
5-6	.0	.0	2.9	14.3	.0	.0	17.1	
7	.0	2.9	.0	2.9	2.9	.0	8.6	
8-9	.0	2.9	2.9	2.9	2.9	.0	11.4	
10-11	.0	.0	.0	8.6	8.6	.0	17.1	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	5.7	2.9	.0	8.6	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	5.7	2.9	.0	.0	8.6	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	2.9	25.7	17.1	37.1	17.1	.0	100.0	35

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	4.8	6.5	1.6	4.8	1.6	.0	8.1	.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	18	5
6-7	.0	.0	6.5	8.1	8.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	5
8-9	.0	.0	.0	.0	4.8	3.2	.0	.0	1.6	.0	.0	6.5	.0	.0	.0	.0	.0	.0	.0	10	14
10-11	.0	3.2	.0	.0	1.6	6.5	1.6	.0	.0	.0	6.5	.0	1.6	.0	.0	.0	.0	.0	.0	13	10
12-13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.2	.0	.0	.0	.0	.0	.0	.0	.0	2	21
>13	.0	.0	.0	.0	.0	.0	.0	.0	1.6	.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0	2	18
INDET	3.2	.0	.0	.0	.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	3
TOTAL	8.1	6	5	8	10	7	6	.0	7	.0	3	5	0	0	0	0	0	0	0	62	9
PCT	8.1	9.7	8.1	12.9	16.1	11.3	9.7	.0	11.3	.0	4.8	8.1	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1902-1975
(OVER-ALL) 1869-1975

MAY

AREA 0025 MAGELLAN STRAIT WEST
53.85 73.8W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA								
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OBS TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA	
N	4.9	17.5	7.8	.0	.0	.0	.0	30.1	2.9	.0	21.4	.0	.0	.0	45.6	
NE	16.1	32.3	.0	.0	.0	.0	.0	48.4	.0	.0	.0	.0	.0	.0	51.6	
E	11.1	.0	.0	.0	.0	.0	.0	11.1	.0	.0	.0	.0	.0	.0	88.9	
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	
S	.0	.0	.0	.0	8.9	.0	.0	8.9	.0	.0	26.7	.0	.0	.0	64.4	
SW	10.1	4.0	4.0	.0	.0	.0	.0	18.2	8.1	.0	12.1	.0	.0	.0	61.6	
W	11.9	7.5	3.0	.0	6.0	.0	3.0	31.3	5.2	3.0	3.0	.0	.0	.0	57.5	
NW	9.0	17.0	6.0	.0	.0	.0	.0	32.0	1.0	.0	15.0	.0	.0	.0	52.0	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	20.0	.0	.0	.0	.0	20.0	.0	.0	.0	.0	.0	.0	80.0	
TOT PCT	8.5	11.6	4.9	.0	1.8	.0	.6	27.4	3.0	.6	12.2	.0	.0	.0	56.7	
TOT OBS:	164															

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE								OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OBS TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	BLWG DUST	SPRAY BLWG SNOW	NO SIG WEA
00003	5.1	15.2	.0	.0	.0	.0	.0	21.2	.0	.0	9.1	.0	.0	.0	.0	69.7
06009	5.5	9.1	7.3	.0	1.8	.0	.0	23.6	5.5	1.8	16.4	.0	.0	.0	.0	52.7
12015	6.9	13.8	6.9	.0	3.4	.0	.0	31.0	3.4	.0	10.3	.0	.0	.0	.0	55.2
18021	15.4	9.6	3.8	.0	1.9	.0	1.9	32.7	1.9	.0	13.5	.0	.0	.0	.0	51.9
TOT PCT TOT OBS:	8.9 169	11.2	4.7	.0	1.8	.0	.6	27.2	3.0	.6	13.0	.0	.0	.0	.0	56.2

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	0-3	WIND SPEED (KNOTS)					48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
		4-10	11-21	22-33	34-47	00					03	06	09	12	15	18	21
N	.4	2.5	2.8	2.0	1.3	.4		9.5	20.3	12.5	.0	6.7	9.2	7.5	.0	9.5	11.8
NE	.2	1.3	1.7	1.0	.2	.1		4.5	16.2	3.6	.0	3.6	3.2	5.2	.0	5.2	5.3
E	.3	1.3	1.1	.7	.1	.0		3.6	14.5	4.1	.0	4.0	3.4	1.9	.0	3.4	5.3
SE	.4	1.5	1.1	.7	.3	.0		4.0	14.8	4.1	.0	4.9	5.5	4.8	.0	2.8	3.6
S	.3	2.2	3.4	1.3	.8	.1		8.1	17.4	8.4	.0	6.3	10.0	9.0	.0	8.1	6.4
SW	.2	3.7	6.1	4.9	4.1	.8		19.9	23.3	18.2	.0	22.3	22.3	19.9	.0	18.8	19.3
W	.3	3.1	7.5	7.4	5.0	1.3		24.6	24.7	20.9	.0	19.8	20.2	22.2	.0	30.9	23.9
NW	.3	3.7	6.6	6.5	5.1	2.2		24.5	25.8	26.5	.0	30.0	24.8	27.7	.0	20.2	23.9
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.5							1.5	.0	1.7	.0	2.4	1.4	1.8	.0	1.2	.5
TOT OBS	66	331	520	423	293	86	1719		22.2	234	0	253	219	224	0	587	202
TOT PCT	3.8	19.3	30.3	24.6	17.0	5.0		100.0		100.0	.0	100.0	100.0	100.0	.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	06	12	18	21
N		1.1	3.3	2.4	1.6	1.0		9.5	20.3	12.5	7.9	7.5	10.0
NE		.9	1.6	1.3	.6	.1		4.5	16.2	3.6	3.4	5.2	5.2
E		1.0	1.1	.9	.6	.0		3.6	14.5	4.1	3.7	1.9	3.9
SE		.9	1.6	.8	.5	.1		4.0	14.8	4.1	5.2	4.8	3.0
S		1.0	2.2	2.4	1.1	.3		8.1	17.4	8.4	6.1	9.0	7.7
SW		1.5	5.5	5.3	5.4	2.2		19.9	23.3	18.2	22.3	19.9	18.9
W		1.5	5.5	7.6	6.9	3.1		24.6	24.7	20.9	20.0	22.2	29.1
NW		1.4	5.3	7.5	6.0	4.4		24.5	25.8	26.5	27.6	27.7	21.1
VAR		.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM		1.5						1.5	.0	1.7	1.9	1.8	1.0
TOT OBS		186	467	485	390	191	1719		22.2	234	472	224	789
TOT PCT		10.8	27.2	28.2	22.7	11.1		100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1902-1975
(OVER-ALL) 1869-1975

MAY

AREA 0025 MAGELLAN STRAIT WEST
53.85 73.8W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	1.7	2.1	18.8	30.3	23.5	18.2	7.3	22.4	100.0	234
0600Z	1.9	2.3	21.4	29.2	23.5	17.2	4.4	21.8	100.0	472
1200Z	1.8	1.3	21.0	27.2	24.6	20.1	4.0	22.4	100.0	224
1800Z	1.0	2.8	17.6	31.7	25.6	16.3	4.9	22.3	100.0	789
TOT	25	41	391	520	423	293	86	22.2		1719
PCT	1.5	2.4	19.3	30.3	24.6	17.0	5.0		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS CD	TOTAL OBS	MEAN CLOUD COVER
N	1.4	.0	6.0	4.2		6.2
NE	.0	.9	.5	5.6		7.2
E	1.9	.9	.0	1.9		4.6
SE	.0	.0	1.9	.9		7.3
S	1.4	.0	1.9	1.9		5.6
SW	2.3	1.9	2.8	8.3		6.1
W	4.2	3.7	18.5	6.0		5.5
NW	1.9	.0	3.7	6.5		6.3
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	3.7	5.6		7.6
TOT OBS	7	4	21	22	54	6.1
TOT PCT	13.0	7.4	38.9	40.7	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
149	299	599	999	1999	3999	4999	6499	7999			
.0	.0	1.4	2.8	.0	.9	3.7	.0	.0	.0	2.8	
.0	.0	.5	4.2	.0	.0	.0	.0	.0	.0	.9	1.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	2.8
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	1.9
.0	.0	.0	1.9	.0	1.9	.0	.0	.0	.0	.0	1.4
.0	3.7	.5	2.3	2.8	1.9	.0	.0	.0	.0	.0	4.2
.0	.0	3.2	6.9	9.7	.0	.0	.0	.0	.0	.0	12.5
.0	.0	1.9	4.2	.5	.9	.0	.0	.0	.0	.0	4.6
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	3.7	3.7	1.9	.0	.0	.0
.0	2	4	12	7	5	4	1	0	2	17	34
.0	3.7	7.4	22.2	13.0	9.3	7.4	1.9	.0	3.7	31.5	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= NH >500	1.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8
= NH >5000	3.8	5.7	5.7	5.7	5.7	5.7	5.7	5.7
= NH >3500	9.4	13.2	13.2	13.2	13.2	13.2	13.2	13.2
= NH >2000	11.3	18.9	20.8	20.8	20.8	20.8	20.8	20.8
= NH >1000	17.0	26.4	30.2	32.1	32.1	34.0	34.0	34.0
= NH >600	26.4	43.4	50.9	52.8	52.8	56.6	56.6	56.6
= NH >300	30.2	49.1	58.5	60.4	60.4	64.2	64.2	64.2
= NH >150	30.2	50.9	62.3	64.2	64.2	67.9	67.9	67.9
= NH >0	30.2	50.9	62.3	64.2	64.2	67.9	67.9	67.9
TOTAL	16	27	33	34	34	36	36	36

TOTAL NUMBER OF OBSI 53

PCT FREQ NH <5/8 32.1

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	DBSCD	TOTAL OBS
6.7	5.0	6.7	5.0	6.7	11.7	13.3	16.7	28.3	.0	60

PERIOD: (PRIMARY) 1902-1975
(OVER-ALL) 1809-1975

MAY

AREA 0025, MAGELLAN STRAIT WEST
53.85 73.8W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.6	.6	.6	.6	.0	.0	2.5	.0
	TOT %	.6	.0	.0	.0	.6	.6	.6	.6	.0	.0	3.1	.0
1/2<1	PCP	.6	.3	.0	.0	.0	.9	.9	1.6	.0	.0	4.4	.0
	NO PCP	.9	.0	.0	.0	.0	1.3	.0	.3	.0	.0	2.5	.0
	TOT %	1.6	.3	.0	.0	.0	2.2	.9	1.9	.0	.0	6.9	.0
1<2	PCP	.3	.3	.0	.0	.0	.6	.6	.0	.0	.0	1.9	.0
	NO PCP	1.3	.0	.0	.0	.0	.6	.0	.0	.0	.0	1.9	.0
	TOT %	1.6	.3	.0	.0	.0	1.3	.6	.0	.0	.0	3.8	.0
2<5	PCP	.6	.6	.0	.0	.0	.0	.6	.6	.0	.6	3.1	.0
	NO PCP	.6	.0	.0	.0	.0	2.2	.9	1.3	.0	.0	5.0	.0
	TOT %	1.3	.6	.0	.0	.0	2.2	1.6	1.9	.0	.6	8.1	.0
5<10	PCP	2.7	1.1	.3	.0	.6	.6	2.8	7.5	.0	.0	15.6	.0
	NO PCP	6.3	1.4	.0	.0	3.4	4.8	2.7	15.8	.0	.6	35.0	.0
	TOT %	8.9	2.5	.3	.0	4.1	5.5	5.5	23.3	.0	.6	50.6	.0
10+	PCP	.0	.0	.0	.0	.0	.0	1.3	.0	.0	.0	1.3	.0
	NO PCP	2.2	1.1	1.9	.9	2.3	3.1	10.2	3.3	.0	1.3	26.3	.0
	TOT %	2.2	1.1	1.9	.9	2.3	3.1	11.4	3.3	.0	1.3	27.5	.0
TOT OBS													
TOT PCT		16.1	4.8	2.2	.9	7.0	14.8	20.6	30.9	.0	2.5	100.0	160

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.5	.0	.0	.0	.5	.0	.0	.0	.0	.0	1.1	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.5	.5	.5	.0	.0	1.6	.0
	TOT %	.5	.0	.0	.0	.5	.5	.5	.5	.0	.0	2.7	.0
1/2<1	0-3	.3	.0	.0	.0	.0	.0	.0	.3	.0	.0	.5	.0
	4-10	.8	.3	.0	.0	.0	1.1	.0	.0	.0	.0	2.2	.0
	11-21	.5	.0	.0	.0	.0	.8	1.1	1.4	.0	.0	3.8	.0
	22+	1.5	.1	.0	.0	.0	.0	.3	.3	.0	.0	2.2	.0
	TOT %	3.1	.4	.0	.0	.0	1.9	1.4	1.9	.0	.0	8.7	.0
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.5	.0
	11-21	.8	.3	.0	.0	.0	.0	.0	.0	.0	.0	1.1	.0
	22+	.5	.0	.0	.0	.0	.5	.5	.0	.0	.0	1.6	.0
	TOT %	1.4	.3	.0	.0	.0	1.1	.5	.0	.0	.0	3.3	.0
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.5	.0
	4-10	1.1	.0	.0	.0	.0	1.4	.3	.5	.0	.0	3.3	.0
	11-21	.0	.0	.0	.0	.0	.5	.8	1.4	.0	.0	2.7	.0
	22+	.3	.5	.0	.0	.0	.0	.5	.8	.0	.0	2.2	.0
	TOT %	1.4	.5	.0	.0	.0	1.9	1.6	2.7	.0	.5	8.7	.0
5<10	0-3	.3	.5	.3	.0	.0	.0	.0	.0	.0	.5	1.6	.0
	4-10	3.4	.1	.5	.0	.3	1.9	.5	5.7	.0	.0	12.6	.0
	11-21	1.5	1.6	.0	.0	1.6	2.5	1.9	6.7	.0	.0	15.8	.0
	22+	3.4	.4	.3	.0	1.6	1.0	2.3	8.5	.0	.0	17.5	.0
	TOT %	8.6	2.7	1.1	.0	3.6	5.3	4.8	20.9	.0	.5	47.5	.0
10+	0-3	.0	.5	.0	.0	.0	.0	.8	.3	.0	1.1	2.7	.0
	4-10	.5	.0	.5	1.1	1.0	.7	1.4	.8	.0	.0	6.0	.0
	11-21	1.5	.4	.3	.0	1.6	1.5	5.1	2.2	.0	.0	12.6	.0
	22+	.4	.0	1.1	.0	.0	.5	3.8	1.8	.0	.0	7.7	.0
	TOT %	2.5	1.0	1.9	1.1	2.6	2.7	11.1	5.1	.0	1.1	29.0	.0
TOT OBS													
TOT PCT		17.5	4.9	3.0	1.1	6.7	13.5	19.9	31.1	.0	2.2	100.0	183

MAY

PERIOD: (PRIMARY) 1902-1975
(OVER-ALL) 1869-1975AREA 0025 MAGELLAN STRAIT WEST
53.85 73.8W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HR	0/0	1/0	3/0	6/0	10/0	20/0	35/0	50/0	65/0	80/0+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
(GMT)	149	299	599	999	1999	3499	4999	6499	7999				
00003	.0	11.1	.0	11.1	22.2	11.1	.0	.0	.0	.0	55.6	44.4	9
06009	.0	7.1	7.1	14.3	7.1	21.4	.0	7.1	.0	7.1	71.4	28.6	14
12015	.0	.0	15.4	30.8	7.7	.0	15.4	.0	.0	.0	69.2	30.8	13
18021	.0	.0	5.3	26.3	15.8	5.3	10.5	.0	.0	5.3	68.4	31.6	19
TOT	0	2	4	12	7	5	4	1	0	2	37	18	55
PCT	.0	3.6	7.3	21.8	12.7	9.1	7.3	1.8	.0	3.6	67.3	32.7	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NH) BY HOUR

HR	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL
(GMT)							OBS
00003	5.9	.0	2.9	8.8	61.8	20.6	34
06009	1.5	13.8	3.1	7.7	41.5	32.3	65
12015	9.1	9.1	3.0	6.1	45.5	27.3	33
18021	.0	8.9	3.6	10.7	44.6	32.1	56
TOT	6	17	6	16	88	55	188
PCT	3.2	9.0	3.2	8.5	46.8	29.3	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NH) AND/OR
CEILING HGT (FEET, NH >4/8) BY HOUR

HR	<150	<600	<1000	1000+	NH <5/8 AND 5+	TOTAL
(GMT)	<50YD	<1	<5	AND 5+		OBS
00003	.0	14.3	28.6	28.6	42.9	7
06009	.0	21.4	42.9	28.6	28.6	14
12015	.0	23.1	53.8	15.4	30.8	13
18021	.0	5.3	36.8	31.6	31.6	19
TOT	0	8	22	14	17	53
PCT	.0	15.1	41.5	26.4	32.1	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL	PCT
									OBS	FREQ
55/59	.0	.0	.0	.0	.0	.0	.5	.0	1	.5
50/54	.0	.0	.0	.0	.0	1.6	4.3	2.7	16	8.6
45/49	.0	.0	.0	.0	1.1	7.0	15.1	9.7	61	32.8
40/44	.0	.0	.0	1.1	2.2	5.9	8.1	18.3	66	35.5
35/39	.0	.0	.0	1.1	2.7	2.2	4.3	10.2	38	20.4
30/34	.0	.0	.0	.0	.0	1.1	.0	1.1	4	2.2
TOTAL	0	0	0	4	11	33	60	78	186	100.0
PCT	.0	.0	.0	2.2	5.9	17.7	32.3	41.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
.9	.1	.0	.0	.0	1.7	2.6	3.2	.0	.0
4.8	.1	.5	.0	.0	6.0	5.0	14.1	.0	2.2
9.9	.4	2.2	.0	2.2	5.2	7.4	7.7	.0	.5
1.7	.4	.0	.0	3.9	5.2	3.8	4.8	.0	.5
.0	.0	.0	.0	.0	.0	2.2	.0	.0	.0
17.5	1.6	2.7	.0	6.0	18.3	20.8	29.8	.0	3.2

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL
(GMT)									OBS
00003	55	50	48	43	35	33	30	42.3	237
06009	55	51	49	42	35	31	28	41.9	470
12015	51	50	49	42	34	31	26	41.7	224
18021	55	50	48	42	35	31	28	41.9	761
TOT	55	50	49	42	35	31	26	41.9	1692

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL
(GMT)								OBS
00003	.0	.0	4.8	11.9	38.1	45.2	87	42
06009	.0	.0	8.9	17.9	33.9	39.3	86	56
12015	.0	6.7	3.3	10.0	36.7	43.3	85	30
18021	.0	3.1	4.7	23.4	26.6	42.2	84	64
TOT	0	4	11	33	63	81	85	192

PERIOD: (PRIMARY) 1902-1975
(OVER-ALL) 1869-1975

MAY

AREA 0025, MAGELLAN STRAIT WEST
53.85 73.84

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	33 36	37 40	41 44	45 48	49 52	53 56	TOT	W FOG	NO FOG
9/10	.0	.0	.0	.0	.7	.0	1	.0	.7
6	.0	.0	.0	.0	.0	1.5	2	.0	1.5
5	.0	.0	.0	.7	.7	.0	2	.0	1.5
4	.0	.0	1.5	3.6	2.2	.0	10	1.5	5.8
3	.0	.0	1.5	3.6	.0	.0	7	.0	5.1
2	.0	1.5	1.5	7.3	1.5	.0	16	.7	10.9
1	.0	.7	6.6	.7	.7	.0	12	2.2	6.6
0	.0	.7	9.5	2.2	.7	.0	18	2.9	10.2
-1	.0	.0	8.0	2.9	.0	.0	15	1.5	9.5
-2	.0	.7	.7	1.5	.0	.0	4	.0	2.9
-3	.7	5.8	.0	.7	.0	.0	10	.0	7.3
-4	.0	5.8	.7	.0	.0	.0	9	.0	6.6
-5	.7	2.9	1.5	.7	.0	.0	8	.0	5.8
-6	.7	2.9	.7	.0	.0	.0	6	.7	3.6
-7/-8	.0	5.1	1.5	.0	.0	.0	9	.7	5.8
-9/-10	.7	1.5	.7	.0	.0	.0	4	.0	2.9
-11/-13	2.2	.7	.0	.0	.0	.0	4	.0	2.9
TOTAL	7	39	47	33	9	2	137	14	123
PCT	5.1	28.5	34.3	24.1	6.6	1.5	100.0	10.2	89.8

PERIOD: (OVER-ALL) 1963-1975

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	3.9	.0	.0	.0	.0	3.9	.0	1.3	.0	.0	.0	.0	1.3
1-2	.0	.0	3.9	.0	.0	.0	3.9	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	3.9	.0	.0	3.9	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	3.9	.0	3.9	.0	.0	.0	.0	6.6	.0	6.6
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	3.9	3.9	3.9	3.9	.0	15.8	.0	1.3	.0	.0	6.6	.0	7.9

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

PERIOD: (OVER-ALL) 1963-1975

MAY

AREA 0025 MAGELLAN STRAIT WEST
53.85 73.8W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.3	.0	.0	.0	5.3
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	1.3
10-11	.0	.0	.0	5.3	.0	.0	5.3	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	5.3	.0	.0	5.3	.0	.0	5.3	1.3	.0	.0	6.6

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.6	.0	.0	.0	6.6	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	1.3	.0
5-6	.0	.0	5.3	9.2	.0	.0	14.5	.0	.0	.0	6.6	.0	.0	6.6	.0
7	.0	.0	.0	3.9	.0	.0	9.2	.0	.0	.0	1.3	.0	.0	1.3	.0
8-9	.0	.0	.0	.0	.0	.0	3.9	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	10.5	.0	10.5	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	3.9	.0	.0	.0	3.9	.0	.0	1.3	.0	.0	.0	1.3	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	14.5	17.1	10.5	.0	42.1	.0	.0	7.9	9.2	.0	.0	17.1	94.7

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	5.3	5.3	.0	.0	.0	.0	10.5	.0
1-2	.0	.0	10.5	.0	.0	.0	10.5	.0
3-4	.0	.0	.0	5.3	.0	.0	5.3	.0
5-6	.0	.0	10.5	15.8	.0	.0	26.3	.0
7	.0	.0	5.3	5.3	.0	.0	10.5	.0
8-9	.0	.0	.0	5.3	.0	.0	5.3	.0
10-11	.0	.0	.0	5.3	.0	.0	5.3	.0
12	.0	.0	.0	.0	10.5	.0	10.5	.0
13-16	.0	.0	.0	.0	10.5	.0	10.5	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	5.3	.0	.0	.0	5.3	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	5.3	5.3	31.6	36.8	21.1	.0	100.0	19

PERIOD: (OVER-ALL) 1950-1975

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.0	8.3	.0	5.6	5.6	2.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8
6-7	.0	.0	2.8	.0	2.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2
8-9	.0	.0	.0	.0	.0	5.6	2.8	.0	2.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4
10-11	.0	.0	.0	.0	2.8	11.1	8.3	2.8	5.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11
12-13	.0	.0	.0	.0	.0	.0	.0	.0	5.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	1
INDET	19.4	2.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8
TOTAL	7	4	1	2	4	7	4	1	5	0	1	0	0	0	0	0	0	0	0	36	7
PCT	19.4	11.1	2.8	5.6	11.1	19.4	11.1	2.8	13.9	.0	2.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1900-1977
(OVER-ALL) 1870-1977

JUNE

AREA 0025 MAGELLAN STRAIT WEST
54.05 73.9W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA						
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SIG
N	.0	20.0	25.0	.0	.0	.0	.0	45.0	.0	.0	.0	.0	.0	55.0
NE	.0	.0	.0	.0	15.4	.0	.0	15.4	.0	.0	.0	.0	.0	84.6
E	.0	8.9	.0	.0	.0	.0	.0	8.9	.0	.0	8.9	.0	.0	82.2
SE	22.2	.0	7.4	.0	.0	.0	.0	29.6	14.8	.0	.0	.0	.0	55.6
S	5.3	10.5	15.8	.0	5.3	.0	5.3	42.1	.0	.0	36.8	.0	.0	21.1
SW	.0	9.4	9.4	.0	9.4	.0	3.1	31.3	.0	.0	34.4	.0	.0	34.4
W	.0	10.7	17.9	.0	3.6	.0	.0	32.1	.0	.0	10.7	14.3	.0	42.9
NW	5.3	5.3	9.2	.0	2.6	.0	.0	22.4	.0	.0	7.9	.0	.0	69.7
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	3.4	8.0	10.2	.0	4.5	.0	1.1	27.3	1.1	.0	14.8	2.3	.0	54.5
TOT OBS:	88													

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA						
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SIG
00603	.0	5.0	5.0	.0	10.0	.0	.0	20.0	5.0	.0	15.0	.0	.0	60.0
06609	11.5	3.8	7.7	.0	3.8	.0	3.8	30.8	.0	.0	15.4	.0	.0	53.8
12615	.0	14.3	21.4	.0	.0	.0	.0	35.7	.0	.0	21.4	7.1	.0	35.7
18621	.0	10.0	10.0	.0	6.7	.0	.0	26.7	.0	.0	10.0	3.3	.0	60.0
TOT PCT	3.3	7.8	10.0	.0	5.6	.0	1.1	27.8	1.1	.0	14.4	2.2	.0	54.4
TOT OBS:	90													

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18
N	.3	1.6	2.1	2.5	1.1	.7		8.1	23.4	5.7	.0	8.1	7.3	8.2	.0	9.5	7.8
NE	.2	1.6	2.1	.7	.3	*		5.1	15.8	6.8	.0	4.3	4.1	3.7	.0	5.1	6.4
E	.6	2.1	2.2	.6	.2	.0		5.7	12.9	6.7	.0	5.0	5.8	4.9	.0	6.1	4.9
SE	.4	1.9	2.9	1.3	.3	*		6.9	15.6	9.2	.0	6.9	5.8	6.9	.0	6.1	7.9
S	.6	3.0	3.0	2.5	1.2	.3		10.5	19.1	9.5	.0	16.7	13.9	7.6	.0	8.7	9.3
SW	.5	4.3	6.6	6.5	2.8	1.3		22.1	22.4	21.5	.0	20.0	25.0	25.1	.0	20.7	22.5
W	.6	3.2	7.0	5.8	3.5	2.4		22.4	24.7	22.8	.0	20.3	17.8	23.1	.0	24.6	22.2
NW	.4	2.5	6.7	5.1	2.3	1.3		18.2	23.2	17.3	.0	18.2	18.5	20.6	.0	17.6	17.9
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.1							1.1	.0	.5	.0	.5	1.9	.0	.0	1.6	1.1
TOT OBS	72	921	517	396	187	96	1589		21.2	202	.0	213	216	208	.0	570	180
TOT PCT	4.5	20.2	32.5	24.9	11.8	6.0		100.0		100.0	.0	100.0	100.0	100.0	.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-6	7-16	17-27	28-40	41+						00	03	06	12	15	18	21
N	.8	2.2	2.0	2.1	1.0			8.1	23.4	5.7	7.7	8.2	9.1				
NE	.9	2.0	1.5	.5	.1			5.1	15.8	6.8	4.2	3.7	5.4				
E	1.6	2.2	1.5	.3	*			5.7	12.9	6.7	5.4	4.9	5.8				
SE	1.1	2.7	2.5	.4	.2			6.9	15.6	9.2	6.4	6.9	6.6				
S	2.0	3.0	2.8	1.7	1.0			10.5	19.1	9.5	15.3	7.6	8.8				
SW	2.1	6.0	6.8	4.4	2.8			22.1	22.4	21.5	22.5	25.1	21.1				
W	1.7	5.9	6.7	4.1	4.0			22.4	24.7	22.8	19.1	23.1	24.0				
NW	1.3	4.9	5.8	3.8	2.4			18.2	23.2	17.3	18.4	20.6	17.7				
VAR	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0				
CALM	1.1							1.1	.0	.5	1.2	.0	1.5				
TOT OBS	199	460	471	275	184	1589			21.2	202	429	208	780				
TOT PCT	12.3	28.9	29.6	17.3	11.6			100.0		100.0	100.0	100.0	100.0				

PERIOD: (PRIMARY) 1900-1977
(OVER-ALL) 1870-1977

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	.5	2.0	22.3	34.7	24.3	10.4	5.9	20.6	100.0	202
0600Z	1.2	3.5	19.6	35.7	21.9	11.0	7.2	21.4	100.0	429
1200Z	.0	5.3	21.6	30.8	26.9	13.0	2.4	20.3	100.0	208
1800Z	1.5	3.3	19.6	30.7	26.3	12.3	6.4	21.5	100.0	750
TOT	17	55	321	517	396	187	96	21.2		1589
PCT	1.1	3.5	20.2	32.5	24.9	11.8	6.0		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	.0	.0	.0	7.1		8.0
NE	4.8	.0	.0	.0		2.0
E	.0	.0	3.6	4.8		7.5
SE	.0	4.8	6.0	.0		5.6
S	.0	.0	9.5	.0		6.5
SW	.0	.0	14.3	4.8		6.5
W	.0	4.8	4.8	4.8		5.6
NW	4.8	.0	4.8	16.7		6.1
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	.0	.0		.0
TOT OBS	2	2	9	8	21	6.1
TOT PCT	9.5	9.5	42.9	38.1	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH > 4/8)
AND OCCURRENCE OF NH < 5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH < 5/8 ANY HGT	TOTAL OBS
N	.0	.0	.0	.0	3.6	3.6	.0	.0	.0	.0	.0	.0
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.8
E	.0	.0	.0	.0	3.6	.0	.0	4.8	.0	.0	.0	.0
SE	.0	.0	.0	.0	1.2	.0	.0	.0	.0	.0	.0	9.5
S	.0	4.8	.0	.0	4.8	.0	.0	.0	.0	.0	.0	.0
SW	.0	.0	.0	4.8	14.3	.0	.0	.0	.0	.0	.0	.0
W	.0	.0	.0	.0	.0	.0	9.5	.0	.0	.0	.0	4.8
NW	.0	.0	4.8	.0	10.7	6.0	.0	.0	.0	.0	.0	4.8
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT OBS	0	1	1	1	8	2	2	1	0	0	5	21
TOT PCT	0	4.8	4.8	4.8	38.1	9.5	9.5	4.8	.0	.0	23.8	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH > 4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.0	.0	.0	.0	.0	.0	.0	.0
= OR >5000	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
= OR >3500	4.8	14.3	14.3	14.3	14.3	14.3	14.3	14.3
= OR >2000	9.5	23.8	23.8	23.8	23.8	23.8	23.8	23.8
= OR >1000	14.3	47.6	57.1	61.9	61.9	61.9	61.9	61.9
= OR >600	14.3	47.6	61.9	66.7	66.7	66.7	66.7	66.7
= OR >300	14.3	52.4	66.7	71.4	71.4	71.4	71.4	71.4
= OR >150	19.0	57.1	71.4	76.2	76.2	76.2	76.2	76.2
= OR >0	19.0	57.1	71.4	76.2	76.2	76.2	76.2	76.2
TOTAL	4	12	15	16	16	16	16	16

TOTAL NUMBER OF OBS: 21

PCT FREQ NH < 5/8: 23.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
4.5	9.1	.0	9.1	.0	13.6	22.7	13.6	27.3	.0	22

PERIOD: (PRIMARY) 1900-1977
(OVER-ALL) 1870-1977

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VISBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.6	1.7	.0	.0	2.3	.0
	TOT %	.0	.0	.0	.0	.0	.0	.6	1.7	.0	.0	2.3	.0
1<2	PCP	.0	.0	.0	.0	1.1	1.1	.0	.0	.0	.0	2.3	.0
	NO PCP	.0	.0	.0	.0	.0	.0	1.1	.0	.0	.0	1.1	.0
	TOT %	.0	.0	.0	.0	1.1	1.1	1.1	.0	.0	.0	3.4	.0
2<5	PCP	.0	.0	.0	.0	.0	1.1	.0	.0	.0	.0	1.1	.0
	NO PCP	.0	.0	.0	.0	.0	1.1	1.1	.0	.0	.0	2.3	.0
	TOT %	.0	.0	.0	.0	.0	2.3	1.1	.0	.0	.0	3.4	.0
5<10	PCP	2.6	1.1	1.1	2.3	3.4	3.4	5.1	4.8	.0	.0	23.9	.0
	NO PCP	3.1	3.4	8.8	4.3	5.1	9.1	6.8	12.8	.0	.0	53.4	.0
	TOT %	5.7	4.5	9.9	6.5	8.5	12.5	11.9	17.6	.0	.0	77.3	.0
10+	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	2.8	2.8	1.1	1.1	2.3	1.1	2.3	.0	.0	13.6	.0
	TOT %	.0	2.8	2.8	1.1	1.1	2.3	1.1	2.3	.0	.0	13.6	.0
TOT OBS													
TOT PCT		5.7	7.4	12.8	7.7	10.8	18.2	15.9	21.6	.0	.0	100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VISBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.4	1.3	.0	.0	1.8	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.4	1.3	.0	.0	1.8	.0
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.9	.9	.9	.0	.0	.0	1.8	.0
	11-21	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.9	.0
	22+	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0
	TOT %	.9	.0	.0	.0	.9	.9	.9	.0	.0	.0	3.5	.0
2<5	0-3	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.9	.0
	4-10	.0	.0	.0	.0	.0	.9	.9	.0	.0	.0	.9	.0
	11-21	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.9	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	1.8	.9	.0	.0	.0	2.6	.0
5<10	0-3	.0	.0	2.6	.4	.4	.0	.0	.0	.0	.0	3.5	.0
	4-10	.9	2.6	.9	1.8	2.2	4.4	1.3	1.8	.0	.0	15.8	.0
	11-21	2.0	.9	3.3	1.5	2.2	3.1	7.0	9.0	.0	.0	28.9	.0
	22+	1.5	.0	.9	1.3	1.8	2.2	1.5	3.1	.0	.0	12.3	.0
	TOT %	4.4	3.5	7.7	5.0	6.6	9.6	9.9	13.8	.0	.0	60.5	.0
10+	0-3	.0	.0	.9	.9	1.3	1.3	.0	1.8	.0	.0	6.1	.0
	4-10	.9	1.3	1.8	1.3	4.8	2.2	.7	1.1	.0	.0	14.0	.0
	11-21	.0	.9	.0	.0	.4	.4	.9	3.5	.0	.0	6.1	.0
	22+	.0	.0	.0	.0	.4	2.2	.0	2.6	.0	.0	5.3	.0
	TOT %	.9	2.2	2.6	2.2	7.0	6.1	1.5	9.0	.0	.0	31.6	.0
TOT OBS													
TOT PCT		6.1	5.7	10.3	7.2	14.5	18.4	13.6	24.1	.0	.0	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET) NH $\geq 4/8$ AND
OCCURRENCE OF NH $\leq 5/8$ BY HOUR

HR (GMT)	0'0	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NH $\leq 5/8$ ANY MGT	TOTAL OBS
00003	.0	12.5	.0	.0	50.0	12.5	.0	.0	.0	.0	75.0	25.0	8
06009	.0	.0	50.0	.0	50.0	.0	.0	.0	.0	.0	100.0	.0	2
12015	.0	.0	.0	.0	33.3	33.3	33.3	.0	.0	.0	100.0	.0	3
18021	.0	.0	.0	11.1	33.3	.0	11.1	11.1	.0	.0	66.7	33.3	9
TOT	0	1	1	1	9	2	2	1	0	0	17	5	22
PCT	.0	4.5	4.5	4.5	40.9	9.1	9.1	4.5	.0	.0	77.3	22.7	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	4.0	4.0	4.0	56.0	32.0	25
06009	.0	.0	2.9	.0	70.6	26.5	34
12015	.0	.0	.0	5.0	60.0	35.0	20
18021	.0	2.7	5.4	5.4	54.1	32.4	37
TOT	0	2	4	4	70	36	116
PCT	.0	1.7	3.4	3.4	60.3	31.0	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET) NH $\geq 4/8$ BY HOUR

HR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH $\leq 5/8$ AND 5+	TOTAL OBS
00003	.0	14.3	28.6	42.9	28.6	7
06009	.0	50.0	50.0	50.0	.0	2
12015	.0	.0	.0	100.0	.0	3
18021	.0	.0	33.3	33.3	33.3	9
TOT	0	2	6	10	5	21
PCT	.0	9.5	28.6	47.6	23.8	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
50/54	.0	.0	.0	.0	.0	1.0	9.1	.0	4	4.1
45/49	.0	.0	.0	.0	.0	2.0	1.0	2.0	5	5.1
40/44	.0	.0	.0	.0	1.0	6.1	16.3	15.3	38	38.8
35/39	.0	.0	.0	.0	2.0	2.0	11.2	24.5	39	39.8
30/34	.0	.0	.0	.0	1.0	2.0	3.1	2.0	8	8.2
25/29	.0	.0	.0	.0	.0	4.1	.0	.0	4	4.1
TOTAL	0	0	0	0	4	17	34	43	98	100.0
PCT	.0	.0	.0	.0	4.1	17.3	34.7	43.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	1.0	1.0	1.0	1.0	1.0	.0	.0
.8	.0	.0	1.0	.0	1.0	1.0	1.0	1.0	.0	.0
4.1	5.1	4.3	2.0	1.0	2.6	8.7	11.0	.0	.0	.0
1.0	.0	9.2	3.6	2.6	10.5	9.7	3.3	.0	.0	.0
.0	1.0	.0	2.0	1.5	3.6	.0	.0	.0	.0	.0
.0	.0	.0	.0	4.1	.0	.0	.0	.0	.0	.0
5.9	6.1	13.5	8.7	10.2	18.6	20.4	16.6	.0	.0	.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	50	49	46	41	33	30	29	40.3	199
06009	50	48	46	41	32	28	27	40.2	425
12015	48	47	46	40	32	30	28	40.0	205
18021	52	49	46	40	33	30	26	40.1	736
TOT	52	48	46	40	33	30	26	40.1	1569

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	5.0	10.0	45.0	40.0	86	20		20
06009	.0	.0	3.6	17.9	46.4	32.1	86	28		28
12015	.0	.0	5.0	30.0	20.0	45.0	85	20		20
18021	.0	.0	3.1	12.5	28.1	56.3	88	32		32
TOT	0	0	4	17	35	44	87	100		100

JUNE

PERIOD: (PRIMARY) 1900-1977
(OVER-ALL) 1870-1977

TABLE 17

AREA 0025 MAGELLAN STRAIT WEST
54.0S 73.9WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	25 28	29 32	33 36	37 40	41 44	45 48	49 52	TOT	N FOG	NO FOG
3	.0	.0	.0	.0	2.5	.0	.0	2	.0	2.5
2	.0	.0	.0	.0	6.3	1.3	1.3	7	.0	8.9
1	.0	.0	1.3	.0	5.1	.0	.0	5	.0	6.3
0	.0	.0	.0	1.3	3.8	1.3	.0	5	1.3	5.1
-1	.0	.0	.0	10.1	3.8	1.3	.0	12	5.1	10.1
-2	.0	.0	1.3	13.9	1.3	.0	1.3	14	.0	17.7
-3	.0	.0	.0	7.6	.0	.0	1.3	7	2.5	6.3
-4	.0	.0	.0	8.9	1.3	.0	1.3	9	.0	11.4
-5	.0	.0	2.5	3.8	.0	.0	.0	5	.0	6.3
-6	.0	.0	1.3	2.5	.0	.0	.0	3	.0	2.8
-7/-8	1.3	2.5	3.8	.0	1.3	.0	.0	7	1.3	7.6
-11/-13	.0	.0	1.3	2.5	.0	.0	.0	3	.0	3.8
TOTAL	1	2	9	40	20	3	4	79	8	71
PCT	1.3	2.5	11.4	50.6	25.3	3.8	5.1	100.0	10.1	89.9

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							PCT	NE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.1	.0	.0	.0	.0	.0	9.1
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	6.8	.0	.0	.0	.0	6.8	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	6.8	.0	.0	.0	.0	6.8	.0	9.1	.0	.0	.0	.0	.0	9.1

HGT	E							PCT	SE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	9.1	.0	.0	.0	.0	.0	.0	9.1	.0	.0	.0	.0	.0	.0	.0	.0

AREA 0025 MAGELLAN STRAIT WEST
54.05 73.9W

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

MGT	1-3	4-10	11-21	S 22-33	34-47	48+	PCT	1-3	4-10	11-21	SW 22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	18.2	.0	.0	.0	.0	18.2	.0	9.1	.0	.0	.0	.0	9.1
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.1	.0	.0	.0	9.1
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	18.2	.0	.0	.0	.0	18.2	.0	9.1	9.1	.0	.0	.0	18.2

MGT	1-3	4-10	11-21	W 22-33	34-47	48+	PCT	1-3	4-10	11-21	NW 22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1-2	.0	18.2	.0	.0	.0	.0	18.2	.0	9.1	.0	.0	.0	.0	9.1	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.3	.0	.0	.0	2.3	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.1	.0	.0	9.1	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	18.2	.0	.0	.0	.0	18.2	.0	9.1	2.3	9.1	.0	.0	20.5	100.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT DBS
<1	9.1	.0	.0	.0	.0	.0	9.1	
1-2	.0	63.6	.0	.0	.0	.0	63.6	
3-4	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.0	18.2	.0	.0	.0	18.2	
7	.0	.0	.0	9.1	.0	.0	9.1	
8-9	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	9.1	63.6	18.2	9.1	.0	.0	100.0	11

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

[illegible]

PERIOD: (PRIMARY) 1899-1977
(OVER-ALL) 1854-1977

JULY

TABLE 1

AREA 0025 MAGELLAN STRAIT WEST
54.1S 73.8W

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG	FOG WD PCPN	SMOKE	HAZE	NO SIG
N	14.1	4.4	2.2	.0	.0	.0	.0	20.7	8.1	.0	20.7	.0	.0	.0	50.4
NE	13.9	11.1	5.6	.0	.0	.0	.0	30.6	.0	.0	.0	.0	.0	.0	69.4
E	5.1	.0	5.1	.0	.0	.0	10.3	20.5	.0	.0	5.1	.0	.0	.0	74.4
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	28.6	.0	.0	.0	71.4
S	.0	.0	.0	.0	12.2	.0	.0	12.2	18.4	.0	12.2	.0	.0	8.2	49.0
SW	.0	4.3	.0	.0	23.3	.0	.0	32.6	4.7	.0	7.0	.0	.0	.0	55.8
W	10.7	14.8	1.6	.0	8.2	.0	1.6	33.6	5.7	.0	.0	.0	.0	.0	80.7
NW	31.4	14.5	10.5	.0	2.6	.0	.9	59.1	9.9	.0	1.8	.0	.0	.0	33.2
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	14.3	.0	14.3	.0	.0	.0	71.4
TOT PCT	14.7	9.2	4.3	.0	6.0	.0	1.1	34.2	6.5	.0	7.6	.0	.0	.5	51.1
TOT OBS:	184														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG	FOG WD PCPN	SMOKE	HAZE	NO SIG
00003	18.4	7.9	2.6	.0	7.9	.0	.0	36.8	7.9	.0	5.3	.0	.0	.0	50.0
06009	14.3	12.5	5.4	.0	8.9	.0	3.6	41.1	3.6	.0	10.7	.0	.0	.0	44.6
12015	16.7	4.8	4.8	.0	.0	.0	.0	26.2	9.5	.0	7.1	.0	.0	.0	57.1
18021	9.8	9.8	3.9	.0	7.8	.0	.0	31.4	5.9	.0	5.9	.0	.0	2.0	54.9
TOT PCT	14.4	9.1	4.3	.0	6.4	.0	1.1	34.2	6.4	.0	7.5	.0	.0	.5	51.3
TOT OBS:	187														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.3	1.5	2.9	2.4	1.7	1.1		10.0	24.8		11.7	22.2	9.6	9.1	11.6	33.3	8.7	10.4
NE	.2	1.9	1.6	.8	.7	.1		5.3	17.3		7.3	.0	7.6	5.5	3.5	16.7	4.2	4.6
E	.3	1.3	1.4	.7	.4	.6		4.0	16.2		5.2	5.6	3.0	3.9	4.4	16.7	3.4	5.1
SE	.2	1.4	2.1	1.2	1.2	.1		5.2	17.0		5.8	11.1	4.5	5.1	4.2	.0	4.8	8.0
S	.3	2.2	3.2	1.7	1.2	.3		8.9	20.0		6.9	5.6	8.5	9.5	6.5	.0	11.1	7.8
SW	.7	3.2	6.0	4.4	3.7	1.3		19.4	23.3		20.1	11.1	18.6	18.7	17.7	.0	21.1	17.7
W	.4	3.7	7.0	6.7	4.4	1.9		24.1	24.7		20.9	5.6	24.2	22.4	24.2	.0	25.7	25.9
NW	.5	2.0	5.0	6.6	5.0	2.9		22.0	29.0		21.0	38.9	22.6	23.7	25.1	33.3	20.3	20.6
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.2							1.2	.0		1.1	.0	1.4	2.1	2.9	.0	.6	.0
TOT OBS	82	350	599	502	356	158	2047		23.5		279	9	291	284	279	3	680	222
TOT PCT	4.0	17.1	29.3	24.5	17.4	7.7		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	03	06	12	18
N	1.0	2.1	3.2	2.1	1.6		10.0	24.8	12.1	9.3	11.8	9.1	
NE	.9	2.0	1.3	.8	.3		5.3	17.3	7.1	6.6	3.6	4.3	
E	.8	1.6	.9	.5	.2		4.0	16.2	5.2	3.4	4.5	3.8	
SE	.6	2.0	1.8	.6	.2		5.2	17.0	6.0	4.8	4.2	5.6	
S	1.1	2.9	2.3	1.7	.8		8.9	20.0	6.9	9.0	6.5	10.3	
SW	2.0	4.9	5.3	4.6	2.5		19.4	23.3	19.8	18.7	17.5	20.3	
W	1.5	6.2	6.9	5.7	3.7		24.1	24.7	20.4	23.3	23.9	25.8	
NW	1.1	3.3	6.2	6.6	4.7		22.0	29.0	21.5	23.1	25.2	20.4	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	1.2						1.2	.0	1.0	1.7	2.8	.4	
TOT OBS	212	515	572	462	266	2047		23.5	288	575	282	902	
TOT PCT	10.4	25.2	27.9	22.6	14.0		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1899-1977
(OVER-ALL) 1854-1977

JULY

AREA 0025 MAGELLAN STRAIT WEST
54.1S 73.8W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
00L03	1.0	2.8	19.8	29.9	25.7	12.8	8.0	22.4	100.0	288
06L09	1.7	3.0	16.5	28.3	27.1	15.3	8.0	23.4	100.0	575
12L15	2.8	1.8	14.9	28.4	24.8	19.5	7.8	24.2	100.0	282
18L21	.4	3.0	17.3	29.9	22.4	19.5	7.4	23.8	100.0	902
TOT	25	57	350	599	502	350	158	23.5		2047
PCT	1.2	2.8	17.1	29.3	24.5	17.4	7.7		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 9	TOTAL CLOUD OBS	MEAN CLOUD COVER
N	.5	1.9	1.9	13.7		7.2
NE	.5	.0	2.2	.3		6.1
E	.0	1.1	.5	2.2		6.4
SE	.0	.0	.0	.0		.0
S	.8	3.8	2.2	1.1		3.9
SW	2.5	.5	3.3	1.1		3.9
W	1.1	1.1	6.6	6.3		6.1
NW	2.2	.3	4.1	31.3		7.4
VAR	.0	.0	.0	.0		.0
CALM	.0	1.1	1.1	5.5		7.1
TOT OBS	7	9	20	55	91	6.7
TOT PCT	7.7	9.9	22.0	60.4	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999			
N	.0	1.1	.0	2.5	9.6	1.4	1.1	.0	.0	.0	2.5	
NE	.0	.0	.0	.5	1.6	.0	.0	.0	.0	.0	1.1	
E	.0	1.1	.0	.0	1.1	.0	.0	.0	.0	.0	1.6	
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
S	.0	.0	.0	.0	1.1	.0	.0	.0	.0	.0	5.8	
SW	.0	.0	.0	2.2	.0	1.1	.0	.0	.0	.0	4.1	
W	.0	.0	1.1	.0	3.0	1.1	2.2	.0	.0	.0	7.7	
NW	2.2	.0	.0	3.8	17.6	4.1	6.6	.0	.0	.0	3.6	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	1.1	1.1	1.1	.0	2.2	.0	.0	.0	1.1	
TOT OBS	3	2	2	9	32	7	11	0	0	0	25	91
TOT PCT	3.3	2.2	2.2	9.9	35.2	7.7	12.1	.0	.0	.0	27.5	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	OR			VSBY (NM)			OR		
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0	>0
>6500	.0	.0	.0	.0	.0	.0	.0	.0	.0
>5000	.0	.0	.0	.0	.0	.0	.0	.0	.0
>3500	2.2	7.7	11.0	12.1	12.1	12.1	12.1	12.1	12.1
>2000	6.6	13.2	17.6	18.7	18.7	18.7	19.8	19.8	19.8
>1000	18.7	40.7	50.5	52.7	52.7	52.7	54.9	54.9	54.9
>600	23.1	49.5	60.4	62.6	62.6	62.6	64.8	64.8	64.8
>300	25.3	51.6	62.6	64.8	64.8	64.8	67.0	67.0	67.0
>150	25.3	52.7	64.8	67.0	67.0	67.0	69.2	69.2	69.2
>0	25.3	53.8	67.0	69.2	69.2	69.2	72.5	72.5	72.5
TOTAL	23	49	61	63	63	63	66	66	66

TOTAL NUMBER OF OBS: 91

PCT FREQ NH <5/8: 27.5

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
	2.1	3.2	8.4	11.6	3.2	9.5	6.3	8.4	44.2	3.2	95

PERIOD: (PRIMARY) 1899-1977
(OVER-ALL) 1854-1977

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TABLE 8

AREA 0025 MAGELLAN STRAIT WEST
54.15 73.8W

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.0	1.1	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.5	
	TOT %	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.5	1.6	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.0	1.1	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.0	1.1	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.0	1.1	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.0	1.1	
2<5	PCP	.8	.8	.0	.0	.0	.0	.5	4.9	.0	.0	7.1	
	NO PCP	.0	.3	.8	.0	.8	.3	1.1	.5	.0	.0	3.8	
	TOT %	.8	1.1	.8	.0	.8	.3	1.6	5.4	.0	.0	10.9	
5<10	PCP	2.2	.5	1.1	.0	.8	3.8	5.0	7.7	.0	.0	21.2	
	NO PCP	7.6	1.1	.3	.8	2.6	4.6	4.2	8.2	.0	1.1	30.4	
	TOT %	9.8	1.6	1.4	.8	3.4	8.4	9.2	15.9	.0	1.1	51.6	
10+	PCP	.8	.1	.0	.0	.0	.0	.0	1.8	.0	.0	2.7	
	NO PCP	6.9	2.0	3.1	2.0	2.4	3.0	5.7	3.5	.0	2.2	31.0	
	TOT %	7.7	2.2	3.1	2.0	2.4	3.0	5.7	5.3	.0	2.2	33.7	
TOT OBS													184
TOT PCT													100.0

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VISBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.5	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	1.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.5	1.5	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	1.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	1.0	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	1.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	1.0	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5	
	4-10	.0	.0	.2	.2	.0	.0	.0	1.0	.0	.0	1.5	
	11-21	.0	.2	.7	.2	1.0	.2	.0	1.0	.0	.0	3.4	
	22+	1.0	.7	.0	.2	.2	.0	1.7	3.4	.0	.0	7.4	
	TOT %	1.0	1.0	1.0	.7	1.2	.2	1.7	5.9	.0	.0	12.8	
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	1.0	
	4-10	.2	.7	.7	.2	2.2	2.2	1.0	.5	.0	.0	7.9	
	11-21	4.6	.5	.5	.5	.4	3.7	4.2	7.4	.0	.0	21.7	
	22+	4.1	.2	.0	.0	1.0	1.7	3.2	6.5	.0	.0	16.7	
	TOT %	8.9	1.5	1.2	.7	3.6	7.6	8.4	14.4	.0	1.0	47.3	
10+	0-3	.0	.0	.5	.0	.4	.6	.0	.0	.0	2.0	3.4	
	4-10	2.1	1.5	1.2	1.0	1.5	.5	1.0	1.6	.0	.0	10.3	
	11-21	3.0	.4	.7	1.2	1.2	1.7	5.2	.9	.0	.0	14.3	
	22+	2.2	.1	.4	.1	.5	.7	1.7	2.6	.0	.0	8.4	
	TOT %	7.3	2.0	2.8	2.3	3.6	3.6	7.9	5.0	.0	2.0	36.5	
TOT OBS													203
TOT PCT													100.0

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PERIOD: (PRIMARY) 1899-1977
(OVER-ALL) 1854-1977AREA 0025 MAGELLAN STRAIT WEST
54.15 73.8W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00603	4.0	4.0	.0	12.0	44.0	8.0	8.0	.0	.0	.0	80.0	20.0	25
06609	.0	.0	4.8	9.5	38.1	4.8	9.5	.0	.0	.0	66.7	33.3	21
12615	.0	.0	.0	4.5	18.2	13.6	22.7	.0	.0	.0	59.1	40.9	22
18621	8.0	4.0	4.0	12.0	36.0	4.0	8.0	.0	.0	.0	76.0	24.0	25
TOT	3	2	2	9	32	7	11	0	0	0	66	27	93
PCT	3.2	2.2	2.2	9.7	34.4	7.5	11.8	.0	.0	.0	71.0	29.0	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00603	2.3	.0	.0	30.2	32.6	34.9	43
06609	1.6	1.6	1.6	9.5	60.3	25.4	63
12615	.0	2.2	2.2	8.7	43.5	43.5	46
18621	1.9	.0	.0	5.6	48.1	44.4	54
TOT	3	2	2	26	98	75	206
PCT	1.5	1.0	1.0	12.6	47.6	36.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <3	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00603	4.0	8.0	48.0	36.0	16.0	25
06609	.0	9.5	28.6	38.1	33.3	21
12615	.0	.0	19.0	47.6	33.3	21
18621	8.3	20.8	41.7	41.7	16.7	24
TOT	3	9	32	37	22	91
PCT	3.3	9.9	35.2	40.7	24.2	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
45/49	.0	.0	.0	.7	.7	4.0	2.0	4.6	18	11.9
40/44	.0	.0	.0	.0	2.6	7.3	17.2	13.2	61	40.4
35/39	.0	.0	.0	.7	4.6	9.3	7.9	15.9	58	38.4
30/34	.0	.0	.0	.0	.0	2.0	1.3	3.3	10	6.6
25/29	.0	.0	.0	.0	.0	.7	.0	2.0	4	2.6
TOTAL	0	0	0	2	12	35	43	59	151	100.0
PCT	.0	.0	.0	1.3	7.9	23.2	28.5	39.1		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
1.2	.0	.7	.0	.7	.0	1.3	6.8	.0	1.3	
6.5	2.6	.7	.0	.7	1.3	9.1	17.5	.0	2.0	
7.0	2.8	3.0	.0	3.3	4.6	10.8	5.6	.0	1.3	
.0	1.3	.7	.0	.8	3.1	.7	.0	.0	.0	
.0	.0	.0	.0	1.0	1.2	.5	.0	.0	.0	
14.6	6.8	5.0	.0	6.5	10.3	22.4	30.0	.0	4.6	

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00603	49	48	46	40	32	29	27	39.6	282
06609	49	48	46	40	32	30	27	39.5	559
12615	50	48	46	40	31	30	28	39.5	274
18621	52	48	46	39	31	27	20	38.9	682
TOT	52	48	46	39	32	28	20	39.3	1997

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00603	.0	3.3	3.3	13.3	26.7	53.3	87	30		
06609	.0	.0	10.4	22.9	33.3	33.3	83	48		
12615	.0	.0	9.4	28.1	25.0	37.5	83	32		
18621	.0	2.3	9.3	25.6	27.9	34.9	83	43		
TOT	0	2	13	35	44	59	84	193		

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PERIOD: (PRIMARY) 1899-1977
(OVER-ALL) 1854-1977

TABLE 17

AREA 0025 MAGELLAN STRAIT WEST
54.1S 73.8WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	25 28	29 32	33 36	37 40	41 44	45 48	49 52	TOT	W FOG	NO FOG
5	.0	.0	.0	.0	.0	.0	.6	1	.0	.6
4	.0	.0	.0	.0	.0	2.9	.0	5	.0	2.9
3	.0	.0	.0	.0	.6	2.3	.0	5	.0	2.9
2	.0	.0	.0	1.1	1.7	2.9	.0	10	.0	5.7
1	.0	.0	.0	.0	3.4	2.3	.0	10	.0	5.7
0	.0	.0	.0	.0	8.0	1.7	.0	17	.6	9.2
-1	.0	.0	.0	5.2	4.0	1.1	.6	20	2.3	9.2
-2	.0	.0	.0	4.6	7.5	.6	.0	22	1.1	11.5
-3	.0	.0	2.9	3.4	2.9	.0	.0	14	1.1	8.0
-4	.0	.0	.6	5.7	1.7	.0	.0	14	.0	8.0
-5	.0	.0	2.3	1.1	1.7	.6	.0	10	.0	5.7
-6	.0	.6	2.9	2.9	.0	.0	.0	11	.6	5.7
-7/-8	.0	.6	5.2	1.7	3.4	.0	.0	19	.6	10.3
-9/-10	.6	.0	1.7	.6	.6	.0	.0	6	.6	2.9
-11/-13	.0	1.1	.0	.6	.0	.0	.0	3	.0	1.7
-14/-16	1.7	.6	.6	.0	.0	.0	.0	5	.0	2.9
TOTAL	4	5	29	62	25	2		174	6.9	162
PCT	2.3	2.9	16.7	27.0	35.6	14.4	1.1	100.0	6.9	93.1

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	3.8	.0	.0	.0	3.8	.0	.0	.0	.0	.0	.0	.6
3-4	.0	.0	1.9	.0	.0	.0	1.9	.0	.0	.0	.0	.0	.0	.0
5-6	.0	1.9	5.1	.0	.0	.0	7.1	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	1.9	.0	1.9	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	1.9	.0	.0	1.9	.0	.0	.0	.6	.0	.0	.6
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.9	10.9	1.9	1.9	.0	16.7	.0	.0	.6	.6	.0	.0	1.3

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	2.6	.0	.0	.0	.0	2.6	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.6	.0	.0	.0	.0	2.6	.0	.0	.0	.0	.0	.0	.0

PERIOD: (OVER-ALL) 1963-1977

JULY

AREA 0025 MAGELLAN STRAIT WEST
54.15 73.8W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	2.6	.0	.0	.0	.0	.0	2.6
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.2	.0	.0	.0	3.2
5-6	.0	.0	5.8	.0	.0	.0	5.8	.0	.0	1.9	.0	.0	.0	1.9
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.6	.0	.0	.0	2.6
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.6	.0	.0	2.6
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	2.6	2.6	.0	5.1	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	5.8	2.6	2.6	.0	10.9	2.6	.0	7.7	2.6	.0	.0	12.8

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	2.6	.0	.0	.0	.0	2.6	
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.2	.0	.0	.0	3.2	
3-4	.0	.0	4.5	.0	.0	.0	4.5	.0	.0	3.2	.0	.0	.0	3.2	
5-6	.0	.0	.0	2.6	.0	.0	2.6	.0	3.2	2.6	7.7	.0	.0	13.5	
7	.0	.0	1.9	.0	.0	.0	1.9	.0	.0	.0	.0	3.2	.0	9.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.6	.0	2.6	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.6	.0	.0	.0	2.6	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.1	.0	.0	5.1	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	.0	6.4	2.6	.0	.0	9.0	.0	5.8	12.2	17.9	5.8	.0	41.7	94.9

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	10.0	2.5	.0	.0	.0	.0	12.5	
1-2	.0	.0	7.5	.0	.0	.0	7.5	
3-4	.0	.0	12.5	.0	.0	.0	12.5	
5-6	.0	7.5	15.0	10.0	.0	.0	32.5	
7	.0	.0	5.0	5.0	.0	.0	15.0	
8-9	.0	.0	.0	5.0	2.5	.0	7.5	
10-11	.0	.0	2.5	.0	.0	.0	2.5	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	7.5	2.5	.0	10.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	10.0	10.0	42.5	27.5	10.0	.0	100.0	40

PERIOD: (OVER-ALL) 1952-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	4.0	6.7	6.7	6.7	4.0	1.3	1.3	.0	1.3	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	25	5
6-7	.0	.0	2.7	1.3	5.3	2.7	1.3	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	8
8-9	.0	.0	.0	.0	2.7	1.3	.0	5.3	2.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	10
10-11	.0	.0	.0	.0	.0	.0	2.7	.0	4.0	10.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	15
12-13	.0	.0	.0	.0	.0	1.3	.0	.0	2.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	11
>13	.0	.0	.0	.0	.0	2.7	.0	.0	1.3	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	13
INDET	8.0	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	7	0
TOTAL	9	6	7	6	9	7	4	12	10	1	0	0	0	0	0	0	0	0	0	75	8
PCT	12.0	8.0	9.3	8.0	12.0	9.3	5.3	5.3	16.0	13.3	1.3	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1904-1977
(OVER-ALL) 1870-1977

AUGUST

AREA 0025 MAGELLAN STRAIT WEST
54.15 73.9W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA						
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SIG WEA
N	25.7	.0	5.9	.0	2.0	.0	.0	33.7	3.0	.0	7.9	.0	.0	.0 55.4
NE	13.3	.0	26.7	.0	.0	.0	.0	40.0	.0	.0	.0	.0	.0	.0 60.0
E	14.0	.0	.0	.0	.0	.0	.0	14.0	9.3	.0	.0	.0	.0	.0 76.7
SE	5.3	.0	.0	.0	.0	.0	.0	5.3	.0	.0	42.1	.0	.0	.0 52.6
S	.0	.0	2.8	.0	2.8	.0	.0	5.6	9.9	.0	.0	.0	.0	.0 84.5
SW	5.0	.0	5.0	.0	5.0	.0	.0	15.0	12.5	.0	.0	.0	.0	.0 72.5
W	7.8	.0	.0	.0	.0	.0	.0	7.8	12.2	.0	.0	.0	.0	.0 80.0
NW	10.9	3.8	1.4	.0	1.4	.0	.0	19.6	10.1	.0	2.9	.0	.0	.0 67.4
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0 .0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0 .0
TOT PCT	11.2	1.5	3.0	.0	1.5	.0	.0	17.2	8.2	.0	5.2	.0	.0	.0 69.4
TOT OBS:	134													

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA						
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SIG WEA
00003	7.3	2.4	.0	.0	4.9	.0	.0	14.6	12.2	.0	4.9	.0	.0	.0 68.3
06009	15.6	.0	3.1	.0	.0	.0	.0	18.8	3.1	.0	6.3	.0	.0	.0 71.9
12015	.0	3.7	.0	.0	.0	.0	.0	3.7	14.8	.0	7.4	.0	.0	.0 74.1
18021	18.4	.0	7.9	.0	.0	.0	.0	26.3	2.6	.0	2.6	.0	.0	.0 68.4
TOT PCT	10.9	1.4	2.9	.0	1.4	.0	.0	16.7	8.0	.0	5.1	.0	.0	.0 70.3
TOT OBS:	138													

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	0-3	WIND SPEED (KNOTS)						48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
		4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	.1	2.0	2.5	2.6	1.0	.3		8.6	21.2		8.8	20.0	10.2	6.5	7.4	.0	9.1	8.3
NE	.1	1.7	2.6	1.0	.3	*		5.8	16.3		5.2	10.0	5.4	6.0	4.9	.0	5.7	8.0
E	.3	1.9	1.5	.8	.2	.1		4.8	14.6		5.0	25.0	5.5	4.4	3.8	.0	4.9	3.9
SE	.1	1.2	1.3	.7	.3	.2		3.8	18.1		4.9	5.0	3.8	2.8	2.9	10.0	3.7	4.4
S	.3	1.9	2.5	2.4	1.4	.4		8.7	21.9		6.7	20.0	8.0	9.9	10.6	50.0	9.1	6.6
SW	.5	3.4	5.7	5.5	3.0	2.0		20.2	24.3		20.0	10.0	16.7	22.3	21.3	20.0	20.0	22.4
W	.6	4.5	7.2	7.2	4.2	2.4		26.0	24.5		26.0	10.0	24.6	25.6	26.4	20.0	27.1	25.3
NW	.2	3.0	6.2	6.2	3.4	1.7		20.8	24.8		22.3	.0	24.1	22.4	21.3	.0	18.6	20.4
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.4							1.4	.0		1.2	.0	1.7	.0	1.5	.0	1.9	.7
TOT OBS	91	478	720	644	334	175	2442		22.5		338	10	346	311	328	5	823	281
TOT PCT	3.7	19.6	29.5	26.4	13.7	7.2		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	06	12	18
N	.9	2.6	2.5	1.8	.7		8.6	21.2	9.1	8.4	7.3	8.9
NE	.7	2.5	1.7	.8	.1		5.8	16.3	5.3	5.7	4.8	6.3
E	1.2	1.7	1.2	.5	.1		4.8	14.6	5.5	5.0	3.8	4.7
SE	.5	1.4	1.2	.5	.2		3.8	18.1	4.9	3.3	3.0	3.9
S	1.0	2.6	2.0	2.2	.9		8.7	21.9	7.0	8.9	11.2	8.4
SW	2.3	4.3	6.0	4.5	3.1		20.2	24.3	19.7	19.3	21.2	20.6
W	2.3	6.1	7.3	6.3	4.0		26.0	24.5	25.6	25.1	26.3	26.6
NW	1.5	4.4	6.5	5.4	3.0		20.8	24.8	21.7	23.3	20.9	19.1
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	1.4						1.4	.0	1.1	.9	1.5	1.6
TOT OBS	289	626	691	537	299	2442		22.5	348	657	333	1104
TOT PCT	11.8	25.6	28.3	22.0	12.2		100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1904-1977
(OVER-ALL) 1870-1977

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AREA 0025 MAGELLAN STRAIT WEST
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)						MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47	48+			
00003	1.1	3.7	18.7	33.3	25.0	12.1	6.0	21.5	100.0	348
06009	.9	1.5	21.9	31.7	23.7	12.5	7.8	22.2	100.0	657
12015	1.5	2.1	21.0	24.3	28.2	14.7	8.1	23.2	100.0	333
18021	1.6	2.5	18.0	28.5	27.8	14.6	6.9	22.8	100.0	1104
TOT	.3	.8	4.8	7.0	64.4	33.4	17.5	22.5		2442
PCT	1.4	2.4	19.6	29.5	26.4	13.7	7.2	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	3.1	.8	4.7	9.8		6.4
NE	.0	.0	.0	.0		.0
E	3.1	1.6	.0	4.7		5.1
SE	.0	.8	.0	5.5		7.5
S	1.6	2.0	3.1	3.0		5.4
SW	.0	.4	.8	3.1		7.4
W	1.6	2.7	10.9	5.5		5.7
NW	4.7	4.3	7.0	14.5		5.9
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	.0	.0		.0
TOT OBS	9	8	17	30	64	6.0
TOT PCT	14.1	12.5	26.6	46.9	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH > 4/8)
AND OCCURRENCE OF NH < 5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH < 5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999			
N	.0	.0	2.7	1.2	4.3	4.7	.0	.0	.0	.0	5.5	
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
E	.0	.0	.0	2.3	2.3	.0	.0	.0	.0	.0	4.7	
SE	.0	.0	.8	.8	2.3	.0	1.6	.0	.0	.0	.8	
S	.0	.0	.8	.0	4.7	.0	.0	.0	.0	.0	5.1	
SW	.0	.0	1.6	1.6	.8	.0	.0	.0	.0	.0	.4	
W	.0	.0	.0	.0	9.0	4.3	.0	.0	.0	.0	7.4	
NW	.0	.0	2.0	2.0	9.4	2.0	.0	.0	.0	.0	15.2	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT OBS	0	0	5	5	21	7	1	0	0	0	25	64
TOT PCT	.0	.0	7.8	7.8	32.8	10.9	1.6	.0	.0	.0	39.1	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH > 4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	> 10	> 5	> 2	> 1	> 1/2	> 1/4	> 50YD	> 0
> 6500	.0	.0	.0	.0	.0	.0	.0	.0
> 5000	.0	.0	.0	.0	.0	.0	.0	.0
> 3500	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
> 2000	7.7	12.3	12.3	12.3	12.3	12.3	12.3	12.3
> 1000	20.0	43.1	44.6	44.6	44.6	44.6	44.6	44.6
> 600	23.1	49.2	52.3	52.3	52.3	52.3	52.3	52.3
> 300	26.2	55.4	60.0	60.0	60.0	60.0	60.0	60.0
> 150	26.2	55.4	60.0	60.0	60.0	60.0	60.0	60.0
> 0	26.2	55.4	60.0	60.0	60.0	60.0	60.0	60.0
TOTAL	17	36	39	39	39	39	39	39

TOTAL NUMBER OF OBS 65

PCT FREQ NH < 5/8 40.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
3.9	3.9	11.7	6.5	10.4	6.5	10.4	11.7	35.1	77

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PERIOD: (PRIMARY) 1904-1977
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	PCP	.0	.0	.0	.0	.4	.4	.4	.4	.0	.0	1.5	.0
	NO PCP	.7	.0	.0	.0	.0	.0	1.5	.0	.0	.0	2.2	.0
	TOT %	.7	.0	.0	.0	.4	.4	1.9	.4	.0	.0	3.7	.0
1<2	PCP	.7	.0	.0	.0	.0	.0	.0	.7	.0	.0	1.5	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.7	.0	.0	.0	.0	.0	.0	.7	.0	.0	1.5	.0
2<5	PCP	2.8	.4	.0	.0	.4	.7	.9	.7	.0	.0	6.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	2.8	.4	.0	.0	.4	.7	.9	.7	.0	.0	6.0	.0
5<10	PCP	2.8	.7	1.1	.4	.0	.0	.0	3.2	.0	.0	8.2	.0
	NO PCP	6.2	.4	2.2	4.1	4.1	1.9	7.5	13.2	.0	.0	39.6	.0
	TOT %	9.0	1.1	3.4	4.5	4.1	1.9	7.5	16.4	.0	.0	47.8	.0
10+	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	5.6	1.3	4.7	2.6	8.4	4.5	6.5	7.5	.0	.0	41.0	.0
	TOT %	5.6	1.3	4.7	2.6	8.4	4.5	6.5	7.5	.0	.0	41.0	.0
TOT OBS													
TOT PCT													
		18.8	2.8	8.0	7.1	13.2	7.5	16.8	25.7	.0	.0	100.0	134

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.6	.0	.0	.0	.0	.0	.6	.0	.0	.0	1.1	.0
	11-21	.0	.0	.0	.0	.0	.6	.8	.3	.0	.0	1.7	.0
	22+	.0	.0	.0	.0	.3	.3	.6	.0	.0	.0	1.1	.0
	TOT %	.6	.0	.0	.0	.3	.8	1.9	.3	.0	.0	3.9	.0
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.3	.3	.0	.0	.0	.8	.6	.3	.0	.0	2.2	.0
	22+	.6	.0	.0	.0	.0	.0	.0	1.1	.0	.0	1.7	.0
	TOT %	.8	.3	.0	.0	.0	.8	.6	1.4	.0	.0	3.9	.0
2<5	0-3	.0	.0	.0	.0	.3	.3	.0	.0	.0	.0	.6	.0
	4-10	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.6	.0
	11-21	.8	.6	.0	.0	.0	.3	.3	.3	.0	.0	2.2	.0
	22+	2.1	.0	.0	.0	.0	.0	.4	.8	.0	.0	3.3	.0
	TOT %	2.9	.6	.0	.0	.3	.6	1.3	1.1	.0	.0	6.7	.0
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.6	.0	1.7	1.1	.0	.8	.8	1.4	.0	.0	5.6	.0
	11-21	3.3	.6	.3	1.9	1.0	2.1	1.9	6.7	.0	.0	17.8	.0
	22+	3.9	.8	.6	.3	2.1	1.5	4.7	6.7	.0	.0	20.6	.0
	TOT %	7.8	1.4	2.5	3.3	3.1	3.6	7.5	14.7	.0	.0	43.9	.0
10+	0-3	.0	.0	.3	.3	.6	.6	.0	.0	.0	.0	1.7	.0
	4-10	.8	1.5	3.2	.8	3.1	1.1	2.8	2.2	.0	.0	15.6	.0
	11-21	2.2	2.2	1.4	.8	2.8	1.8	2.6	3.9	.0	.0	17.8	.0
	22+	3.2	.1	.0	.3	.7	.1	1.0	1.3	.0	.0	6.7	.0
	TOT %	6.3	3.9	4.9	2.2	7.1	3.6	6.4	7.4	.0	.0	41.7	.0
TOT OBS													
TOT PCT													
		18.3	6.1	7.4	5.6	10.7	9.4	17.6	24.9	.0	.0	100.0	180

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PERIOD: (PRIMARY) 1904-1977
(OVER-ALL) 1870-1977AREA 0025 MAGELLAN STRAIT WEST
54.1S 73.9W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	.0	.0	11.8	11.8	11.8	.0	.0	.0	.0	.0	35.3	64.7	17
06009	.0	.0	.0	5.9	23.5	11.8	5.9	.0	.0	.0	47.1	52.9	17
12015	.0	.0	18.8	.0	31.3	25.0	.0	.0	.0	.0	75.0	25.0	16
18021	.0	.0	.0	11.8	58.8	5.9	.0	.0	.0	.0	76.5	23.5	17
TOT	0	0	5	5	21	7	1	0	0	0	39	28	67
PCT	.0	.0	7.5	7.5	31.3	10.4	1.5	.0	.0	.0	58.2	41.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	5.9	5.9	5.9	43.1	39.2	51
06009	.0	2.0	2.0	6.1	42.9	46.9	49
12015	.0	5.7	2.9	5.7	40.0	45.7	35
18021	.0	2.0	4.1	8.2	44.9	40.8	49
TOT	0	7	7	12	79	79	184
PCT	.0	3.8	3.8	6.5	42.9	42.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOUR (GMT)	<150 <5000	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.0	13.3	26.7	13.3	60.0	15
06009	.0	.0	5.9	41.2	52.9	17
12015	.0	18.8	18.8	56.3	25.0	16
18021	.0	.0	17.6	58.8	23.5	17
TOT	0	5	11	28	26	65
PCT	.0	7.7	16.9	43.1	40.0	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
50/54	.0	.0	.0	.0	.0	.0	.8	.0	1	.8
45/49	.0	.0	.0	.0	.0	4.9	1.6	4.9	14	11.5
40/44	.0	.0	.8	.0	6.6	15.6	13.9	13.1	61	50.0
35/39	.0	.0	.0	1.6	5.7	5.7	15.6	8.2	45	36.9
30/34	.0	.0	.0	.0	.8	.0	.0	.0	1	.8
TOTAL	0	0	1	2	16	32	39	32	122	100.0
PCT	.0	.0	.8	1.6	13.1	26.2	32.0	26.2		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.6	.2	.0	.0	.0	.0
7.0	.0	.0	.0	2.3	.2	.0	2.0	.0	.0
6.8	.8	4.1	1.6	1.6	1.0	9.6	23.6	.0	.8
5.7	.2	2.7	1.2	.0	8.0	9.6	7.8	.0	1.6
.4	.0	.0	.0	.0	.0	.0	.4	.0	.0
19.9	1.0	6.8	2.9	4.5	9.4	19.3	33.8	.0	2.5

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	90%	5%	1%	MIN	MEAN	TOTAL OBS
00003	51	47	45	39	32	30	27	39.3	342
06009	49	47	45	39	32	28	25	39.1	648
12015	50	47	45	39	32	28	28	38.9	328
18021	51	47	45	40	32	30	22	39.4	1073
TOT	51	47	45	39	32	29	22	39.2	2391

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	6.1	12.1	27.3	30.3	24.2	80	33
06009	.0	.0	9.1	24.2	36.4	30.3	83	33
12015	.0	3.8	15.4	38.5	23.1	19.2	78	26
18021	.0	.0	15.6	21.9	34.4	28.1	82	32
TOT	0	3	16	34	39	32	81	124

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TABLE 17

AREA 0025 MAGELLAN STRAIT WEST
54.15 73.9WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	29 32	33 36	37 40	41 44	45 48	49 52	TOT	N FOG	NO FOG
7/8	.0	.0	.0	.0	.0	.8	1	.0	.8
6	.0	.0	.0	.8	.0	.0	1	.0	.8
4	.0	.0	.8	.0	1.6	.0	3	.0	2.3
3	.0	.0	.0	.8	2.3	.0	4	.0	3.1
2	.0	.0	.8	5.5	4.7	.0	14	.0	10.9
1	.0	.0	.0	8.6	1.6	.0	13	1.6	8.6
0	.0	.0	1.6	11.7	.8	.0	18	.8	13.3
-1	.0	.0	1.6	7.0	.8	.0	12	.0	9.4
-2	.0	1.6	3.9	9.4	.0	.0	19	.0	14.8
-3	.0	.0	3.1	2.3	.0	.0	7	.0	5.5
-4	.0	1.6	4.7	1.6	.0	.0	10	.0	7.8
-5	.0	2.3	2.3	1.6	.0	.0	8	.0	6.3
-6	.0	1.6	4.7	.0	.0	.0	8	.0	6.3
-7/-8	.8	3.1	1.6	.0	.0	.0	7	.8	4.7
-9/-10	2.3	.0	.0	.0	.0	.0	3	2.3	.0
TOTAL	4	13	63	19	1	128	100.0	5.5	94.5
PCT	3.1	10.2	25.0	49.2	11.7	.8			

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	5.8	.0	.0	5.8	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	5.8	.0	5.8	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	5.8	5.8	.0	11.5	.0	.0	.0	.0	.0	.0	.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	7.7	.0	.0	.0	7.7	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	7.7	.0	.0	.0	7.7	.0	.0	.0	.0	.0	.0	.0

PERIOD: (OVER-ALL) 1963-1977

AUGUST

AREA 0025 MAGELLAN STRAIT WEST
54.15 73.9W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							PCT	SW							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	7.7	.0	.0	.0	.0		7.7	.0	.0	.0	.0	.0	.0		.0
1-2	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
3-4	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
5-6	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
7	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
8-9	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
10-11	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
12	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
13-16	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
17-19	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
20-22	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
23-25	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
26-32	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
33-40	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
41-48	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
49-60	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
61-70	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
71-86	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
87+	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
TOT PCT	.0	7.7	.0	.0	.0	.0		7.7	.0	.0	.0	.0	.0	.0		.0

HGT	W							PCT	NW							PCT	TOTAL PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+			
<1	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
1-2	.0	5.8	.0	.0	.0	.0		5.8	.0	1.9	.0	.0	.0	.0		1.9	
3-4	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
5-6	.0	.0	.0	.0	.0	.0		.0	.0	.0	7.7	.0	.0	.0		7.7	
7	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
8-9	.0	.0	.0	5.8	.0	.0		5.8	.0	.0	.0	1.9	.0	.0		1.9	
10-11	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	1.9	.0	.0		1.9	
12	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
13-16	.0	.0	7.7	5.8	13.5	.0		26.9	.0	.0	.0	1.9	3.8	.0		5.8	
17-19	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
20-22	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
23-25	.0	.0	.0	.0	7.7	.0		7.7	.0	.0	.0	.0	7.7	.0		7.7	
26-32	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
33-40	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
41-48	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
49-60	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
61-70	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
71-86	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
87+	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
TOT PCT	.0	5.8	7.7	11.5	21.2	.0		46.2	.0	1.9	7.7	5.8	11.5	.0		26.9	100.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	.0	7.7	.0	.0	.0	.0	7.7	
1-2	.0	7.7	.0	.0	.0	.0	7.7	
3-4	.0	.0	7.7	.0	.0	.0	7.7	
5-6	.0	.0	7.7	.0	.0	.0	7.7	
7	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	7.7	.0	.0	7.7	
10-11	.0	.0	.0	7.7	.0	.0	7.7	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	7.7	7.7	23.1	.0	38.5	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	15.4	.0	15.4	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	15.4	23.1	23.1	38.5	.0	100.0	13

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.7	8.3	16.7	2.0	8.3	3.3	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	27
6-7	.0	.0	3.3	1.7	1.7	1.7	1.7	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	7
8-9	.0	.0	.0	.0	.0	5.0	1.7	.0	6.7	.0	.0	1.7	1.7	.0	.0	.0	.0	.0	.0	.0	14
10-11	.0	.0	.0	.0	.0	3.3	.0	.0	5.0	.0	3.3	6.7	.0	.0	.0	.0	.0	.0	.0	.0	18
12-13	.0	.0	.0	.0	.0	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
INDET	3.3	.0	3.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4
TOTAL	3	5	14	4	6	9	3	1	7	0	2	5	1	0	0	0	0	0	0	0	60
PCT	5.0	8.3	23.3	6.7	10.0	15.0	5.0	1.7	11.7	.0	3.3	8.3	1.7	.0	.0	.0	.0	.0	.0	.0	100.0

SEPTEMBER

PERIOD: (PRIMARY) 1901-1977
(OVER-ALL) 1855-1977AREA 0025 MAGELLAN STRAIT WEST
53.8S 74.2W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	PRECIPITATION TYPE					HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	OTHER WEATHER PHENOMENA					
		RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN					FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	BLWG DUST	SPRAY BLWG SNOW	NO SIG WEA
N	6.5	2.7	.0	.0	.0	.0	.0	10.3	12.1	.0	11.2	.0	.0	.0	.0	66.4
NE	.0	.0	8.9	.0	.0	.0	.0	8.9	.0	.0	.0	.0	.0	.0	.0	91.1
E	9.1	.0	18.2	.0	.0	.0	.0	27.3	.0	.0	18.2	.0	.0	.0	.0	54.5
SE	5.1	.0	.0	.0	.0	.0	.0	5.1	.0	.0	10.3	.0	.0	.0	.0	84.6
S	.0	.0	.0	.0	12.9	.0	.0	12.9	.0	.0	.0	.0	.0	.0	.0	87.1
SW	7.4	.0	.0	.0	29.6	.0	.0	37.0	.0	.0	.0	.0	.0	.0	.0	63.0
W	17.1	.0	.0	.0	6.3	.0	3.6	27.0	2.7	.0	9.0	.0	.0	.0	.0	61.3
NW	10.7	8.0	2.7	.0	.7	.0	.0	22.0	10.7	.0	1.3	.0	.0	.0	.0	66.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	8.9	3.0	2.2	.0	3.7	.0	.7	18.5	5.9	.0	5.9	.0	.0	.0	.0	69.6
TOT OBS:	135															

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	PRECIPITATION TYPE					HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	OTHER WEATHER PHENOMENA					
		RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN					FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	BLWG DUST	SPRAY BLWG SNOW	NO SIG WEA
00003	11.4	5.7	8.6	.0	2.9	.0	.0	28.6	8.6	.0	2.9	.0	.0	.0	.0	60.0
06009	5.0	5.0	5.0	.0	2.5	.0	.0	17.5	7.5	.0	10.0	.0	.0	.0	.0	65.0
12015	15.4	.0	2.6	.0	2.6	.0	.0	20.5	2.6	.0	5.1	.0	.0	.0	.0	71.8
18021	2.4	2.4	.0	.0	4.8	.0	2.4	11.9	2.4	.0	2.4	.0	.0	.0	.0	83.3
TOT PCT	8.3	3.2	3.8	.0	3.2	.0	.6	19.2	5.1	.0	5.1	.0	.0	.0	.0	70.5
TOT OBS:	150															

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.5	1.6	2.8	1.6	1.1	.4		7.8	20.4	7.9	.0	9.5	6.8	9.5	20.0	7.7	5.0	
NE	.4	1.5	1.5	.6	.1	.1		4.2	13.9	4.6	.0	3.0	2.5	2.9	17.5	4.8	6.5	
E	.2	.8	.5	.2	.2	*		2.0	13.6	2.2	.0	2.8	2.3	.3	5.0	2.3	1.6	
SE	.3	1.9	.5	.3	.1	*		3.1	10.6	3.1	.0	3.1	2.3	5.0	5.0	2.5	3.3	
S	.2	1.5	1.6	1.1	.7	.1		5.3	18.8	5.9	.0	5.6	3.8	5.0	.0	5.8	4.9	
SW	.7	2.6	6.1	5.6	3.7	1.3		20.0	24.1	20.6	.0	17.7	20.5	19.7	20.0	21.1	18.2	
W	.3	1.9	8.9	10.3	6.3	1.5		31.2	24.9	29.5	25.0	28.1	34.6	29.6	17.5	31.3	35.6	
NW	.3	2.9	6.2	8.4	6.0	1.8		25.5	26.8	25.2	75.0	27.8	26.8	27.8	15.0	24.0	23.8	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.8							.8	.0	1.0	.0	2.4	.4	.4	.0	.5	.4	
TOT OBS	81	357	604	599	387	111	2139		23.2	289	2	296	275	277	10	757	233	
TOT PCT	3.8	16.7	28.2	28.0	18.1	5.2		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40						00	06	12	18
N	.9	2.5	2.5	1.3	.7		7.8	20.4	7.8	8.2	9.8	7.0	
NE	1.1	1.6	1.2	.3	.1		4.2	13.9	4.6	2.7	3.4	5.2	
E	.6	.9	.2	.2	.1		2.0	13.6	2.2	2.5	.4	2.1	
SE	1.6	.9	.3	.1	.1		3.1	10.6	3.1	2.7	5.0	2.8	
S	.9	1.7	1.5	.6	.6		5.3	18.8	5.8	4.7	4.8	5.6	
SW	1.5	6.7	6.2	4.9	2.6		20.0	24.1	20.4	19.1	19.7	20.5	
W	1.8	6.3	10.2	8.8	4.0		31.2	24.9	29.5	31.3	29.2	32.3	
NW	1.2	4.5	7.9	7.5	4.5		25.5	26.8	25.5	27.3	27.4	23.9	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	.8						.8	.0	1.0	1.4	.3	.5	
TOT OBS	224	494	643	507	271	2139		23.2	291	571	287	990	
TOT PCT	10.5	23.1	30.1	23.7	12.7		100.0		100.0	100.0	100.0	100.0	

SEPTEMBER

PERIOD: (PRIMARY) 1901-1977
(OVER-ALL) 1855-1977

AREA 0025 MAGELLAN STRAIT WEST
53.8S 74.2W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)							PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47	48+	MEAN		
0000Z	1.0	1.7	22.3	30.2	25.1	15.8	3.8	21.8	100.0	291
0600Z	1.4	2.3	16.8	28.2	27.8	18.4	5.1	23.2	100.0	571
1200Z	.3	3.1	18.1	24.4	29.3	19.5	5.2	23.4	100.0	287
1800Z	.5	3.7	14.5	28.8	28.6	18.2	5.7	23.6	100.0	990
TOT	17	64	357	604	599	387	111	23.2		2139
PCT	.8	3.0	16.7	28.2	28.0	18.1	5.2		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	4.1	3.0	3.4	9.3		5.3
NE	.4	.0	4.5	3.0		0.7
E	1.5	.0	.0	1.5		4.0
SE	.0	.0	1.5	.0		0.0
S	.0	.0	.0	2.2		8.0
SW	1.5	.4	.0	2.2		5.0
W	3.0	3.7	7.1	11.6		6.0
NW	.0	.4	7.5	26.9		7.5
VAR	.0	.0	.0	.0		3.0
CALM	.0	1.5	.0	.0		3.0
TOT OBS	7	6	16	38	67	6.3
TOT PCT	10.4	9.0	23.9	56.7	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NM >4/8)
AND OCCURRENCE OF NM <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NM <5/8 ANY HGT	TOTAL OBS
N	.0	.0	5.2	.0	2.2	1.1	.0	.0	.0	.0	11.2	
NE	.0	.0	.0	1.5	1.5	1.5	.0	.0	.0	.0	3.4	
E	.0	.0	.0	.0	1.5	.0	.0	.0	.0	.0	1.5	
SE	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.0	.0	
S	.0	.0	.0	2.2	.0	.0	.0	.0	.0	.0	.0	
SW	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	3.4	
W	.0	.0	1.5	5.2	3.7	.0	1.5	.0	.0	.0	13.4	
NW	.0	.0	2.2	9.7	14.9	.4	.0	.0	.0	.0	7.5	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	
TOT OBS	0	0	6	14	16	2	0	1	0	0	28	
TOT PCT	.0	.0	9.0	20.0	23.9	3.0	.0	1.5	.0	.0	41.8	67

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NM >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.0	.0	.0	.0	.0	.0	.0	.0
>5000	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
>3500	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
>2000	1.4	1.4	4.3	4.3	4.3	4.3	4.3	4.3
>1000	11.6	23.2	29.0	29.0	29.0	29.0	29.0	29.0
>600	21.7	40.6	47.8	49.3	49.3	49.3	49.3	49.3
>300	26.1	49.3	56.5	58.0	58.0	58.0	58.0	58.0
>150	26.1	49.3	56.5	58.0	58.0	58.0	58.0	58.0
>0	26.1	49.3	56.5	58.0	58.0	58.0	58.0	58.0
TOTAL	18	34	39	40	40	40	40	40

TOTAL NUMBER OF OBSI 69

PCT FREQ NM <5/81 42.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
4.9	11.1	7.4	8.6	9.9	7.4	9.9	4.9	35.8	.0	81

PERIOD: (PRIMARY) 1901-1977
(OVER-ALL) 1855-1977

SEPTEMBER

AREA 0025 MAGELLAN STRAIT WEST
53.8S 74.2W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.7	
	TOT %	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.7	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	
	TOT %	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	
1<2	PCP	.0	.0	.4	.4	.0	.0	.4	1.1	.0	.0	2.2	
	NO PCP	.6	.0	.0	1.5	.0	.0	.0	.2	.0	.0	2.2	
	TOT %	.6	.0	.4	1.9	.0	.0	.4	1.3	.0	.0	4.4	
2<5	PCP	.0	.0	.0	.0	.0	.0	.4	1.9	.0	.0	2.2	
	NO PCP	.9	1.9	.0	2.2	.0	.0	.7	.9	.0	.0	6.7	
	TOT %	.9	1.9	.0	2.2	.0	.0	1.1	2.8	.0	.0	8.9	
5<10	PCP	1.5	.0	.0	.0	.7	1.9	4.8	1.5	.0	.0	10.4	
	NO PCP	5.9	.0	.4	2.2	1.1	1.1	7.0	14.1	.0	.0	31.9	
	TOT %	7.4	.0	.4	2.2	1.9	3.0	11.9	15.6	.0	.0	42.2	
10+	PCP	.6	.7	.0	.0	.0	.0	.7	1.7	.0	.0	3.7	
	NO PCP	9.6	5.7	1.9	.9	3.9	2.0	7.2	6.5	.0	1.5	39.3	
	TOT %	10.2	6.5	1.9	.9	3.9	2.0	8.0	8.1	.0	1.5	43.0	
TOT OBS													135
TOT PCT		19.8	8.3	3.3	7.2	5.7	5.0	21.3	27.8	.0	1.5	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.7	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.7	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.3	1.7	.0	.0	.0	.0	.0	.0	2.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.9	.0	.0	.0	.0	.0	1.0	2.2	.0	.0	4.1	
	TOT %	.9	.0	.3	1.7	.0	.0	1.0	2.2	.0	.0	6.1	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.3	1.0	.0	2.0	.0	.0	.0	.0	.0	.0	3.4	
	11-21	.0	.7	.0	.0	.0	.0	1.0	1.0	.0	.0	2.7	
	22+	1.0	.2	.0	.0	.0	.0	.0	1.5	.0	.0	2.7	
	TOT %	1.4	1.9	.0	2.0	.0	.0	1.0	2.6	.0	.0	8.8	
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	1.4	.0	.3	2.0	.3	.7	.3	1.0	.0	.0	6.1	
	11-21	1.5	.0	.0	.0	.0	1.0	4.9	4.1	.0	.0	11.6	
	22+	3.9	.0	.0	.0	1.4	1.7	5.6	10.5	.0	.0	23.1	
	TOT %	6.8	.0	.3	2.0	1.7	3.4	10.9	15.6	.0	.0	40.8	
10+	0-3	.7	.7	.7	.7	.7	.7	.0	.0	.0	1.4	5.4	
	4-10	1.7	3.4	1.0	.2	1.9	.7	2.7	.7	.0	.0	12.2	
	11-21	4.6	1.9	.0	.0	.5	.9	3.6	4.3	.0	.0	15.6	
	22+	2.4	.0	.0	.0	.5	.3	2.9	3.4	.0	.0	9.5	
	TOT %	9.4	6.0	1.7	.9	3.6	2.6	9.2	8.3	.0	1.4	42.9	
TOT OBS													147
TOT PCT		19.0	7.8	3.1	6.6	5.3	6.0	22.1	28.7	.0	1.4	100.0	

SEPTEMBER

PERIOD: (PRIMARY) 1901-1977
(OVER-ALL) 1855-1977

AREA 0025 MAGELLAN STRAIT WEST
53.85 74.2W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <3/8 ANY HGT	TOTAL OBS
00603	.0	.0	4.8	23.8	33.3	4.8	.0	.0	.0	.0	66.7	33.3	21
06609	.0	.0	11.8	17.6	23.5	.0	.0	.0	.0	.0	52.9	47.1	17
12615	.0	.0	11.1	16.7	16.7	.0	.0	.0	.0	.0	44.4	55.6	18
18621	.0	.0	5.3	15.8	21.1	5.3	.0	5.3	.0	.0	52.6	47.4	19
TOT	0	0	6	14	18	2	0	1	0	0	41	34	75
PCT	.0	.0	8.0	18.7	24.0	2.7	.0	1.3	.0	.0	54.7	45.3	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00603	.0	.0	9.6	16.7	41.7	36.1	36
06609	.0	2.2	6.7	8.9	48.9	33.3	45
12615	.0	2.4	9.8	2.4	36.6	48.8	41
18621	2.2	.0	6.5	6.5	41.3	43.5	46
TOT	1	2	12	14	71	68	168
PCT	.6	1.2	7.1	8.3	42.3	40.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NM <3/8 AND 5+	TOTAL OBS
00603	.0	5.0	45.0	25.0	30.0	20
06609	.0	14.3	35.7	28.6	35.7	14
12615	.0	11.8	29.4	17.6	52.9	17
18621	.0	5.6	33.3	22.2	44.4	18
TOT	0	6	25	16	28	69
PCT	.0	8.7	36.2	23.2	40.6	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
45/49	.0	.0	.0	.0	7.2	6.2	4.6	2.1	39	20.1
40/44	.0	.0	.0	.0	9.8	21.6	20.1	7.2	114	58.8
35/39	.0	.0	.0	.5	1.5	4.6	5.2	5.7	34	17.5
30/34	.0	.0	.0	.0	.0	.0	2.1	1.5	7	3.6
TOTAL	0	0	0	1	36	63	62	32	194	100.0
PCT	.0	.0	.0	.5	18.6	32.5	32.0	16.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
45/49	6.2	3.0	2.6	2.1	.4	.1	2.4	2.8	.0	.5
40/44	12.1	4.3	.0	2.6	1.2	5.4	15.1	16.6	.0	1.5
35/39	1.8	.4	1.2	4.6	1.5	1.3	4.4	1.3	.0	1.0
30/34	.0	.0	1.3	.3	1.0	.5	.5	.0	.0	.0
TOTAL	20.1	7.6	5.0	9.5	4.1	7.3	22.4	20.7	.0	3.1

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00603	47	46	46	41	34	32	30	40.7	288
06609	48	46	45	41	34	32	31	40.1	579
12615	51	47	45	41	35	30	25	40.3	285
18621	50	48	46	41	34	30	25	40.7	937
TOT	51	48	46	41	34	31	25	40.5	2089

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00603	.0	.0	17.0	38.3	31.9	12.8	78	47		
06609	.0	.0	13.4	24.6	23.1	36.9	82	65		
12615	.0	.0	24.4	15.6	33.3	26.7	81	45		
18621	.0	1.6	14.8	41.0	29.5	13.1	78	61		
TOT	0	1	38	66	63	50	80	218		

SEPTEMBER

PERIOD: (PRIMARY) 1901-1977
(OVER-ALL) 1855-1977

AREA 0025 MAGELLAN STRAIT WEST
53.8S 74.2W

TABLE 17

PCT FRQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	29 32	33 36	37 40	41 44	45 48	49 52	TOT	N FOG	NO FOG
7/8	.0	.0	.0	.0	.8	.0	1	.0	.8
6	.0	.0	.0	.0	.8	.0	1	.0	.8
5	.0	.0	.0	.0	2.3	.0	3	.0	2.3
4	.0	.0	.0	.8	2.3	.0	4	.0	3.0
3	.0	.0	.0	.0	1.5	.0	2	.0	1.5
2	.0	.0	.0	.8	4.5	1.5	9	.0	6.8
1	.0	.0	.0	6.0	2.3	.0	11	.8	7.5
0	.0	.0	1.5	9.8	2.3	.0	18	2.3	11.3
-1	.0	.0	4.5	6.8	1.5	.0	17	.0	12.8
-2	.0	.0	5.3	9.8	1.5	.0	22	.8	15.8
-3	.0	.0	4.5	3.0	.0	.0	10	.8	6.8
-4	.0	.0	5.3	1.5	.0	.0	9	.0	6.8
-5	.0	1.5	1.5	4.5	.8	.0	11	.0	8.3
-6	.0	2.3	1.5	2.3	.0	.0	8	.0	6.0
-7/-8	.8	.0	.0	2.3	.0	.0	4	.0	3.0
-9/-10	.0	.0	.0	.8	.0	.0	1	.0	.8
-11/-12	.0	.0	1.5	.0	.0	.0	2	.0	1.5
TOTAL	1		34		27		133	6	127
PCT	.8	5	64		2		100.0	4.5	95.5

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FRQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	1.5	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.0	.0
1-2	.0	4.0	.0	.0	.0	.0	4.0	.0	.0	2.0	.0	.0	.0	2.0
3-4	.0	.0	1.5	.0	.0	.0	1.5	.0	2.0	.0	.0	.0	.0	2.0
5-6	.0	.0	3.5	1.5	.0	.0	5.0	.0	.0	.5	.0	.0	.0	.5
7	.0	.0	.0	4.5	.0	.0	4.5	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	4.0	.0	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	4.0	10.5	6.0	.0	.0	20.5	.0	2.0	2.5	.0	.0	.0	4.5

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	4.0	.0	.0	.0	.0	4.0	2.0	.0	.0	.0	.0	.0	2.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	4.0	.0	.0	.0	.0	4.0	2.0	.0	.0	.0	.0	.0	2.0

PERIOD: (OVER-ALL) 1963-1977

SEPTEMBER

AREA 0025 MAGELLAN STRAIT WEST
53.85 74.2W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	2.0	.0	.0	.0	.0	2.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	2.0	.0	.0	.0	.0	2.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	2.0	.0	.0	.0	.0	.0	2.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.0	.0	.0	.0	.0	2.0	2.0	2.0	.0	.0	.0	.0	4.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	.0	.0	.0	2.5	
1-2	.0	.0	2.0	.0	.0	.0	2.0	.0	.0	.0	.0	.0	.0	.0	
3-4	.0	4.0	.0	.0	.0	.0	4.0	.0	2.0	4.5	.0	.0	.0	6.5	
5-6	.0	.0	2.0	.0	.0	.0	2.0	.0	.0	10.0	6.5	.0	.0	16.5	
7	.0	.0	7.0	.0	.0	.0	7.0	.0	.0	1.0	1.5	.0	.0	2.5	
8-9	.0	.0	1.5	.0	.0	.0	1.5	.0	.0	.5	.0	.0	.0	.5	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.0	2.0	.0	8.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0	.0	.0	4.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	.0	2.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	.0	2.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	4.0	12.5	.0	.0	.0	16.5	.0	2.0	18.5	18.0	6.0	.0	44.5	98.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	3.8	1.9	3.8	.0	.0	.0	9.6	
1-2	3.8	9.6	3.8	.0	.0	.0	17.3	
3-4	.0	7.7	5.8	.0	.0	.0	13.5	
5-6	.0	.0	15.4	7.7	.0	.0	23.1	
7	.0	.0	7.7	5.8	.0	.0	13.5	
8-9	1.9	.0	5.8	.0	.0	.0	7.7	
10-11	.0	.0	.0	5.8	1.9	.0	7.7	
12	.0	.0	.0	3.8	.0	.0	3.8	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	1.9	.0	1.9	
20-22	.0	.0	.0	.0	1.9	.0	1.9	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	9.6	19.2	42.3	23.1	5.8	.0	100.0	52

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.0	9.2	3.9	6.6	1.3	1.3	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	18	4
6-7	.0	1.3	1.3	.0	2.6	2.6	1.3	1.3	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	8
8-9	.0	.0	.0	.0	2.6	1.3	2.6	3.9	3.9	5.2	1.3	.0	.0	.0	.0	.0	.0	.0	.0	15	13
10-11	.0	.0	.0	3.9	.0	2.6	.0	.0	2.6	3.9	6.6	1.3	.0	.0	.0	.0	.0	.0	.0	15	15
12-13	.0	.0	1.3	1.3	.0	.0	1.3	.0	.0	3.9	3.9	.0	.0	.0	.0	.0	.0	.0	.0	9	15
>13	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	1.3	.0	.0	.0	.0	.0	.0	.0	.0	2	17
INDET	6.6	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	0
TOTAL	5	9	5	9	5	6	5	4	7	10	10	1	0	0	0	0	0	0	0	76	10
PCT	6.6	11.8	6.6	11.8	6.6	7.9	6.6	5.3	9.2	13.2	13.2	1.3	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1898-1977
(OVER-ALL) 1868-1977

OCTOBER

AREA 0025 MAGELLAN STRAIT WEST
53.9S 74.2W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	ORZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	27.0	8.1	8.8	.0	2.7	.0	.0	46.6	6.8	.0	5.4	.0	.0	.0	41.2
NE	.0	14.3	.0	.0	.0	.0	.0	14.3	.0	.0	.0	.0	.0	.0	85.7
E	33.3	.0	.0	.0	.0	.0	.0	33.3	33.3	.0	.0	.0	.0	.0	33.3
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
S	.0	27.3	.0	.0	.0	.0	.0	27.3	.0	.0	.0	.0	.0	.0	72.7
SW	.0	2.7	.0	.0	5.3	.0	5.3	13.3	13.3	.0	5.3	.0	.0	.0	68.0
W	10.7	14.2	12.8	.0	.0	.0	9.9	46.5	2.5	.0	4.9	.8	.0	.0	45.3
NW	11.3	23.5	10.4	.0	.0	.0	3.5	48.7	2.6	.0	3.5	.9	.0	.0	44.3
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	12.6	14.2	8.9	.0	1.1	.0	4.7	41.6	4.7	.0	4.2	.5	.0	.0	48.9
TOT OBS:	190														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	ORZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
0000	4.9	7.3	9.8	.0	2.4	.0	7.3	31.7	7.3	.0	2.4	.0	.0	.0	58.5
0600	12.3	17.5	14.0	.0	.0	.0	1.8	45.6	1.8	.0	3.5	.0	.0	.0	49.1
1200	25.0	11.1	2.8	.0	.0	.0	2.8	41.7	8.3	.0	2.8	.0	.0	.0	47.2
1800	9.8	16.4	6.6	.0	3.3	.0	6.6	42.6	3.3	.0	6.6	1.6	.0	.0	45.9
TOT PCT	12.3	13.8	8.7	.0	1.5	.0	4.6	41.0	4.6	.0	4.1	.5	.0	.0	49.7
TOT OBS:	195														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21	
N	.5	2.0	2.8	2.7	1.1	.6		9.8	21.4		9.3	.0	10.7	7.7	12.3	25.0	9.6	9.1
NE	.4	1.1	.8	.5	.1	*		3.0	13.8		3.0	.0	1.8	3.2	2.8	.0	3.1	3.8
E	.2	.4	.5	.1	.1	.0		1.2	13.1		1.9	.0	.7	.7	1.5	.0	1.1	2.0
SE	.3	.9	.8	.2	.1	*		2.4	12.5		2.7	.0	2.5	2.7	1.7	.0	2.4	2.4
S	.2	.9	1.8	1.3	.6	.0		4.8	18.7		5.3	.0	5.4	4.9	5.0	.0	4.6	4.2
SW	.4	3.8	5.8	4.8	2.4	1.1		18.3	21.7		18.3	50.0	16.2	19.9	17.1	.0	18.9	18.2
W	1.1	3.5	9.2	9.4	5.1	1.8		30.1	24.0		28.7	16.7	28.6	29.2	28.2	37.5	31.2	32.2
NW	.5	3.0	8.8	7.8	6.3	3.0		29.4	26.8		28.8	33.3	33.4	31.5	30.3	37.5	27.9	26.8
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.1							1.1	.0		1.9	.0	.7	.4	1.1	.0	1.0	1.3
TOT OBS	101	341	665	585	343	142	2177		22.9		263	3	280	267	267	4	863	228
TOT PCT	4.6	15.7	30.5	26.9	15.8	6.5		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00 03	06 09	12 15	18 21	
N	1.4	2.5	2.9	2.0	1.0		9.8	21.4	9.2	9.2	12.5	9.5	
NE	.9	1.0	.8	.2	.1		3.0	13.8	3.0	2.5	2.8	3.3	
E	.3	.6	.3	.1	.0		1.2	13.1	1.9	.7	1.5	1.3	
SE	1.0	.6	.6	.2	*		2.4	12.5	2.6	2.6	1.7	2.4	
S	.4	1.9	1.5	.9	.1		4.8	18.7	5.3	5.2	4.9	4.5	
SW	1.7	3.7	5.3	3.7	1.9		18.3	21.7	18.7	18.0	16.9	18.8	
W	2.4	6.2	10.3	7.9	3.3		30.1	24.0	28.6	28.9	28.3	31.5	
NW	1.4	6.1	8.8	7.6	3.5		29.4	26.8	28.9	32.4	30.4	27.7	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	1.1						1.1	.0	1.9	.5	1.1	1.1	
TOT OBS	231	533	666	488	259	2177		22.9	266	547	271	1093	
TOT PCT	10.6	24.5	30.6	22.4	11.9		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1898-1977
(OVER-ALL) 1868-1977

OCTOBER

AREA 0025 MAGELLAN STRAIT WEST
53.9S 74.2W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	1.9	3.8	17.7	33.8	23.3	12.8	6.8	21.6	100.0	266
0600Z	.5	3.5	15.4	32.5	26.1	14.6	7.3	22.9	100.0	547
1200Z	1.1	2.6	19.2	30.3	25.8	14.4	6.6	22.3	100.0	271
1800Z	1.1	3.8	14.5	28.8	28.4	17.4	6.0	23.4	100.0	1093
TOT	23	78	341	665	585	343	142	22.9		2177
PCT	1.1	3.6	15.7	30.5	26.9	15.8	6.3		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.0	1.3	4.4	14.6		7.3
NE	.0	.0	.0	.0		.0
E	.0	.0	1.3	2.5		7.3
SE	.0	.0	.0	1.3		8.0
S	.0	.0	.0	.0		.0
SW	2.5	1.3	2.5	9.2		6.3
W	2.2	2.5	10.8	15.2		6.6
NW	.3	1.3	6.3	10.3		7.2
VAR	.0	.0	.0	.0		.0
CALM	.0	1.3	.0	.0		4.0
TOT OBS	4	6	20	49	79	6.9
TOT PCT	5.1	7.6	25.3	62.0	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH ANY	45/8 HGT	TOTAL OBS
.9	2.2	.9	2.2	7.0	4.4	1.3	.0	.0	.0	.0	1.3	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.0	2.5	.0	.0	.0	.0	.0	.0	.0	1.3	
.0	.0	.0	1.3	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	1.3	1.3	1.6	6.0	.0	1.3	.0	.0	.0	4.1	
.0	.0	.0	3.2	10.8	9.8	.0	.0	.0	.0	.0	7.0	
.3	.3	.3	3.5	14.9	5.1	.0	1.3	.0	.0	.0	1.6	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	
1	2	2	11	27	20	1	2	0	0	0	13	
1.3	2.5	2.5	13.9	34.2	25.3	1.3	2.5	.0	.0	16.5	79	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)				VSBY (NM)				VSBY (NM)			
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0	>10	>5	>2	>1
>6500	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
>5000	.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	.0	.0	.0	.0
>3500	1.2	3.7	3.7	3.7	3.7	3.7	3.7	3.7	.0	.0	.0	.0
>2000	9.9	22.2	28.4	28.4	28.4	28.4	28.4	28.4	.0	.0	.0	.0
>1000	14.8	50.6	59.3	61.7	61.7	61.7	61.7	61.7	.0	.0	.0	.0
>600	17.3	58.0	71.6	75.3	75.3	75.3	75.3	75.3	.0	.0	.0	.0
>300	18.5	59.3	74.1	77.8	77.8	77.8	77.8	77.8	.0	.0	.0	.0
>150	18.5	60.5	75.3	80.2	80.2	80.2	80.2	80.2	.0	.0	.0	.0
>0	18.5	61.7	76.5	81.5	81.5	81.5	81.5	81.5	.0	.0	.0	.0
TOTAL	15	50	62	66	66	66	66	66				

TOTAL NUMBER OF OBS: 81

PCT FREQ NH <5/8: 17.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
	.0	2.4	4.9	3.7	6.1	6.1	8.5	11.0	57.3	82

PERIOD: (PRIMARY) 1898-1977
(OVER-ALL) 1868-1977

OCTOBER

AREA 0025 MAGELLAN STRAIT WEST
53.95 74.2W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VISBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.4	.0	.0	.0	.0	.0	.0	.1	.0	.0	.5	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5	
	TOT %	.4	.0	.0	.0	.0	.0	.0	.7	.0	.0	1.1	
1/2<1	PCP	1.1	.0	.0	.0	.0	.0	.8	.8	.0	.0	2.6	
	NO PCP	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	
	TOT %	2.1	.0	.0	.0	.0	.0	.8	.8	.0	.0	3.7	
1<2	PCP	.5	.0	.0	.0	.0	.0	1.3	.3	.0	.0	2.1	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.5	.0	.0	.0	.0	.0	1.3	.3	.0	.0	2.1	
2<5	PCP	1.7	.3	.0	.0	.0	.3	3.0	5.3	.0	.0	10.5	
	NO PCP	.5	.0	.0	.0	.0	1.2	1.8	1.7	.0	.0	5.3	
	TOT %	2.2	.3	.0	.0	.0	1.4	4.9	7.0	.0	.0	15.8	
5<10	PCP	5.0	.0	.5	.0	.0	.8	9.7	7.1	.0	.0	23.2	
	NO PCP	4.9	.0	.5	1.1	.5	3.9	10.1	11.1	.0	.0	32.1	
	TOT %	9.9	.0	1.1	1.1	.5	4.7	19.9	18.2	.0	.0	55.3	
10+	PCP	.4	.0	.0	.0	.8	.3	.0	1.2	.0	.0	2.6	
	NO PCP	3.9	1.6	.5	.5	1.6	3.4	5.1	2.2	.0	.5	19.5	
	TOT %	4.3	1.6	.5	.5	2.4	3.7	5.1	3.4	.0	.5	22.1	
TOT OBS													190
TOT PCT													100.0

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VISBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.4	.0	.0	.0	.0	.0	.0	.1	.0	.0	.5	
	TOT %	.4	.0	.0	.0	.0	.0	.0	.6	.0	.0	1.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	
	22+	1.5	.0	.0	.0	.0	.0	.7	.7	.0	.0	2.9	
	TOT %	2.0	.0	.0	.0	.0	.0	.7	.7	.0	.0	3.4	
1<2	0-3	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.5	
	4-10	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5	
	11-21	.5	.0	.0	.0	.0	.0	.4	.1	.0	.0	1.0	
	22+	.0	.0	.0	.0	.0	.0	.9	.1	.0	.0	1.0	
	TOT %	.7	.2	.0	.0	.0	.0	1.2	.7	.0	.0	2.9	
2<5	0-3	.0	.0	.0	.0	.0	.0	.4	.1	.0	.0	.5	
	4-10	.0	.0	.0	.0	.0	.0	.7	.2	.0	.0	1.0	
	11-21	.5	.0	.0	.0	.0	.5	1.7	2.7	.0	.0	5.4	
	22+	1.6	.2	.0	.0	.0	.9	1.7	3.4	.0	.0	7.8	
	TOT %	2.1	.2	.0	.0	.0	1.3	4.3	6.3	.0	.0	14.7	
5<10	0-3	.9	.0	.0	.5	.0	.0	.1	.0	.0	.0	1.5	
	4-10	1.8	.0	.5	.0	.0	1.3	2.6	2.5	.0	.0	8.8	
	11-21	3.8	.0	.5	.5	.5	2.5	7.4	8.0	.0	.0	23.0	
	22+	3.1	.0	.0	.0	.0	.5	8.6	6.5	.0	.0	18.6	
	TOT %	9.6	.0	1.0	1.0	.5	4.4	18.5	17.0	.0	.0	52.0	
10+	0-3	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5	1.0	
	4-10	1.5	.5	.0	.0	.5	.6	1.7	2.6	.0	.0	7.4	
	11-21	.6	.2	.5	.5	.7	2.2	2.0	2.1	.0	.0	8.8	
	22+	2.0	2.2	.0	.0	1.5	.6	1.8	.7	.0	.0	8.8	
	TOT %	4.0	2.9	.5	.5	2.7	3.4	6.0	5.4	.0	.5	26.0	
TOT OBS													204
TOT PCT													100.0

OCTOBER

PERIOD: (PRIMARY) 1898-1977
(OVER-ALL) 1868-1977AREA 0025 MAGELLAN STRAIT WEST
53.95 74.2W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY MGT	TOTAL DBS
00603	5.9	.0	11.8	5.9	23.5	17.6	.0	.0	.0	.0	64.7	35.3	17
06609	.0	.0	.0	13.6	40.9	27.3	.0	9.1	.0	.0	90.9	9.1	22
12615	.0	.0	.0	16.7	38.9	27.8	5.6	.0	.0	.0	88.9	11.1	18
18621	.0	8.3	.0	16.7	33.3	25.0	.0	.0	.0	.0	83.3	16.7	24
TOT	1	2	2	11	28	20	1	2	0	0	67	14	81
PCT	1.2	2.5	2.5	13.6	34.6	24.7	1.2	2.5	.0	.0	82.7	17.3	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL DBS
00603	2.3	2.3	.0	11.4	59.1	25.0	44
06609	1.6	3.1	3.1	10.9	53.1	28.1	64
12615	.0	.0	2.6	17.9	51.3	28.2	39
18621	.0	6.5	4.8	19.4	43.5	25.8	62
TOT	2	7	6	31	107	56	209
PCT	1.0	3.3	2.9	14.8	51.2	26.8	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL DBS
00603	5.9	17.6	29.4	35.3	35.3	17
06609	4.5	4.5	22.7	68.2	9.1	22
12615	.0	.0	33.3	55.6	11.1	18
18621	.0	8.3	41.7	41.7	16.7	24
TOT	2	6	26	41	14	81
PCT	2.5	7.4	32.1	50.6	17.3	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL DBS	PCT FREQ
50/54	.0	.0	.0	.0	2.8	2.3	.5	.0	12	5.5
45/49	.0	.0	.5	.5	1.4	6.0	6.5	5.5	44	20.3
40/44	.0	.0	.0	.5	10.1	13.4	22.6	18.9	142	65.4
35/39	.0	.0	.0	.0	.9	1.8	2.8	.5	13	6.0
30/34	.0	.0	.0	.0	1.8	.0	.0	.0	6	2.8
TOTAL	0	0	1	2	37	51	70	56	217	100.0
PCT	.0	.0	.5	.9	17.1	23.5	32.3	25.8		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
1.0	1.3	.0	.0	.0	.5	1.2	1.2	.0	.5	
6.7	.3	.9	1.8	.0	1.2	3.8	5.5	.0	.0	
14.4	1.3	.5	.5	.3	4.4	19.7	24.4	.0	.0	
.0	.0	.0	.0	.0	.6	3.1	2.3	.0	.0	
.5	.0	.0	.0	.0	.9	.9	.5	.0	.0	
22.6	2.9	1.4	2.3	.3	7.5	28.7	33.9	.0	.5	

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL DBS
00603	53	52	48	42	37	31	31	42.2	263
06609	53	48	46	42	36	32	31	41.5	531
12615	52	49	46	42	36	33	32	42.0	259
18621	59	51	48	43	36	33	28	42.3	1058
TOT	59	50	47	42	36	32	28	42.1	2111

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL DBS
00603	.0	4.5	13.6	22.7	34.1	25.0	81	44
06609	.0	1.5	17.6	20.6	30.9	29.4	81	68
12615	.0	.0	11.9	26.2	40.5	21.4	82	42
18621	.0	.0	20.9	23.9	31.3	23.9	81	67
TOT	0	3	37	51	74	56	81	221

OCTOBER

PERIOD: (PRIMARY) 1898-1977
(OVER-ALL) 1868-1977

TABLE 17

AREA 0025 MAGELLAN STRAIT WEST
53.9S 74.2WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	29 32	33 36	37 40	41 44	45 48	49 52	53 56	TOT	W FOG	WQ FOG
9/10	.0	.0	.0	.0	.0	.0	.6	1	.0	.6
7/8	.0	.0	.0	.0	.0	1.7	.6	4	.0	2.2
6	.0	.0	.0	.6	.0	1.1	.0	3	.0	1.7
5	.0	.0	.0	1.1	2.2	1.1	.0	8	.0	4.5
4	.0	.0	.0	.6	.6	1.1	.0	4	.0	2.2
3	.0	.0	.0	.0	2.2	.6	.0	5	.0	2.8
2	.0	.0	.0	1.7	3.9	.0	.0	10	.0	5.6
1	.0	.0	.0	7.3	2.8	.0	.0	18	1.1	8.9
0	.0	.0	.0	12.8	4.5	.0	.0	31	.6	16.8
-1	.0	.0	2.2	10.6	.6	.0	.0	24	.6	12.8
-2	.0	.0	5.6	6.7	.6	.0	.0	23	.6	12.3
-3	.0	.0	3.4	5.6	1.1	.0	.0	18	.0	10.1
-4	.0	.0	4.5	3.9	.6	.0	.0	16	.0	8.9
-5	.0	.6	1.7	.0	.0	.0	.0	4	.6	1.7
-6	.0	.0	.6	.0	.0	.0	.0	1	.0	.6
-7/-8	1.1	1.1	1.7	.0	.0	.0	.0	7	1.1	2.8
-9/-10	.0	.6	.0	.0	.0	.0	.0	1	.0	.6
-11/-13	.0	.6	.0	.0	.0	.0	.0	1	.0	.6
TOTAL	2	5	35	91	34	10	2	179	8	171
PCT	1.1	2.8	19.6	50.8	19.0	5.6	1.1	100.0	4.5	95.5

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

N								NE							
HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	
<1	4.7	5.4	.0	.0	.0	.0	10.1	.0	.0	.0	.0	.0	.0	.0	
1-2	.0	.0	2.7	.0	.0	.0	2.7	.0	.0	.0	.0	.0	.0	.0	
3-4	.0	2.0	2.7	4.1	.0	.0	8.8	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	4.7	7.4	5.4	4.1	.0	.0	21.6	.0	.0	.0	.0	.0	.0	.0	

E								SE							
HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
3-4	.0	.0	5.4	.0	.0	.0	5.4	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	.0	5.4	.0	.0	.0	5.4	.0	.0	.0	.0	.0	.0	.0	

PERIOD: (OVER-ALL) 1963-1977

OCTOBER

AREA 0025 MAGELLAN STRAIT WEST
53.9S 74.2W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	5.4	.0	.0	.0	.0	5.4
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.7	.0	.0	2.7
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.4	.0	.0	.0	5.4
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	5.4	5.4	2.7	.0	.0	13.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	2.0	4.7	.0	.0	.0	.0	6.8	1.4	.7	.0	.0	.0	.0	2.0	
1-2	.0	2.0	2.0	.0	.0	.0	4.1	.0	.7	6.1	.0	.0	.0	6.8	
3-4	.0	.0	2.0	2.7	.0	.0	4.7	.0	.7	8.8	1.4	.0	.0	10.8	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	2.7	.0	2.7	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	2.0	2.7	.0	4.7	.0	.0	.0	.7	.0	.0	.7	
12	.0	.0	.0	7.4	.0	.0	7.4	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	2.7	.0	2.7	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.7	.0	.0	2.7	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	2.0	6.8	4.1	12.2	8.1	.0	33.1	1.4	2.0	14.9	5.4	.0	.0	23.6	97.3

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	10.8	10.8	.0	.0	.0	.0	21.6	
1-2	.0	8.1	10.8	.0	.0	.0	18.9	
3-4	.0	2.7	18.9	10.8	.0	.0	32.4	
5-6	.0	.0	5.4	.0	.0	.0	5.4	
7	.0	.0	.0	.0	2.7	.0	2.7	
8-9	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	2.7	2.7	.0	5.4	
12	.0	.0	.0	8.1	.0	.0	8.1	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	2.7	.0	2.7	
23-25	.0	.0	.0	2.7	.0	.0	2.7	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	10.8	21.6	35.1	24.3	8.1	.0	100.0	37

PERIOD: (OVER-ALL) 1951-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	4.6	1.5	1.5	1.5	.0	1.5	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8	4
6-7	.0	.0	3.1	3.1	1.5	1.5	1.5	.0	4.6	1.5	1.5	.0	.0	.0	.0	.0	.0	.0	.0	12	10
8-9	.0	3.1	.0	.0	.0	1.5	6.2	.0	7.7	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	11
10-11	.0	.0	1.5	.0	.0	1.5	1.5	.0	1.5	1.5	.0	1.5	.0	.0	.0	.0	.0	.0	.0	6	13
12-13	.0	.0	.0	.0	.0	.0	1.5	1.5	.0	.0	.0	3.1	.0	.0	.0	.0	.0	.0	.0	4	17
>13	.0	.0	.0	.0	.0	.0	.0	.0	12.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8	16
INDET	7.7	9.2	1.5	1.5	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	2
TOTAL	8	9	5	4	1	4	8	2	9	11	1	3	0	0	0	0	0	0	0	65	9
PCT	12.3	13.8	7.7	6.2	1.5	6.2	12.3	3.1	13.8	16.9	1.5	4.6	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1902-1977
(OVER-ALL) 1868-1977

NOVEMBER

AREA 0025 MAGELLAN STRAIT WEST
34.0S 73.9W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA						
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGD W0 PCPN	FGD W0 PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SIG WEA
N	25.0	7.1	10.7	.0	.0	.0	.0	32.1	14.3	.0	3.6	.0	.0	.0 50.0
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	47.1	.0	.0	.0 52.9
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	30.8	.0	.0	.0 69.2
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0 .0
S	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0 100.0
SW	.0	.0	5.6	.0	22.2	.0	11.1	38.9	.0	.0	5.6	.0	.0	.0 55.6
W	10.1	13.4	2.7	.0	2.7	.0	2.7	31.5	4.0	.0	2.7	.0	.0	.0 61.7
NW	17.1	1.8	11.4	.0	.0	.0	1.8	29.4	7.9	.0	9.6	.0	.0	.0 53.1
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0 .0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0 100.0
TOT PCT	12.0	4.9	7.0	.0	3.5	.0	2.8	28.2	5.6	.0	8.5	.0	.0	.0 57.7
TOT OBS:	142													

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA						
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGD W0 PCPN	FGD W0 PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SIG WEA
00003	18.8	3.1	9.4	.0	.0	.0	3.1	31.3	.0	.0	12.5	.0	.0	.0 56.3
06009	10.3	2.6	5.1	.0	5.1	.0	5.1	28.2	7.7	.0	7.7	.0	.0	.0 56.4
12015	9.1	6.1	3.0	.0	3.0	.0	3.0	24.2	12.1	.0	6.1	.0	.0	.0 57.6
18021	8.9	6.7	8.9	.0	4.4	.0	.0	24.4	2.2	.0	6.7	.0	.0	.0 66.7
TOT PCT	11.4	4.7	6.7	.0	3.4	.0	2.7	26.8	5.4	.0	8.1	.0	.0	.0 59.7
TOT OBS:	149													

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.4	1.2	2.2	1.4	1.0	.2		6.4	20.7		4.7	.0	5.3	4.9	5.5	12.5	8.2	7.3
NE	.3	.7	1.3	.2	.1	.0		2.6	13.7		2.4	.0	2.8	2.6	2.5	.0	2.7	2.8
E	.7	1.3	.8	.*	.1	.0		2.9	9.1		3.8	.0	3.6	2.5	3.0	12.5	2.2	3.2
SE	.5	1.8	1.1	.4	.1	.0		3.8	10.8		3.7	.0	4.9	3.6	3.7	.0	3.8	3.2
S	.5	1.7	3.0	2.0	.5	.3		8.0	18.9		9.9	16.7	6.9	10.1	8.1	6.3	6.7	8.6
SW	.8	2.7	6.5	5.6	2.1	1.3		19.0	22.4		19.8	16.7	22.6	20.8	19.1	9.4	15.5	22.9
W	.3	3.9	8.8	9.2	4.9	2.3		29.4	25.0		26.9	22.2	24.4	31.1	32.2	59.4	32.2	23.8
NW	.4	2.9	7.8	9.2	5.3	1.5		27.2	25.4		27.6	44.4	28.5	23.8	25.2	.0	28.3	27.9
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	.6							.6	.0		1.3	.0	.9	.7	.7	.0	.4	.4
TOT OBS	107	382	749	665	335	133	2371		22.4		313	9	324	302	307	8	828	280
TOT PCT	4.5	16.1	31.6	28.0	14.1	5.6		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	03	06	12	18
N	.9	1.6	2.2	1.2	.6		6.4	20.7	4.6	5.1	5.6	8.0	
NE	.7	1.0	.8	.2	.*		2.6	13.7	2.3	2.7	2.5	2.8	
E	1.3	1.0	.4	.1	.0		2.9	9.1	3.6	3.1	3.3	2.5	
SE	1.3	1.8	.6	.1	.0		3.8	10.8	3.6	4.3	3.7	3.7	
S	1.1	2.6	2.5	1.4	.4		8.0	18.9	10.1	8.4	8.0	7.2	
SW	1.8	4.9	6.7	3.5	2.2		19.0	22.4	19.7	21.7	18.8	17.4	
W	1.6	6.6	9.3	8.0	3.8		29.4	25.0	26.8	27.6	32.9	30.1	
NW	1.2	5.2	9.7	7.6	3.5		27.2	25.4	28.0	26.3	24.6	28.2	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	.6						.6	.0	1.2	.8	.6	.4	
TOT OBS	247	586	763	525	250	2371		22.4	322	626	315	1108	
TOT PCT	10.4	24.7	32.2	22.1	10.5		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1902-1977
(OVER-ALL) 1868-1977

NOVEMBER

AREA 0025 MAGELLAN STRAIT WEST
54.05 73.9W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	1.2	5.6	16.8	32.9	24.2	15.2	4.0	21.1	100.0	322
0600Z	.8	4.2	16.5	30.5	26.5	14.1	7.5	22.9	100.0	626
1200Z	.6	3.8	16.2	31.1	27.3	14.0	7.0	22.7	100.0	315
1800Z	.4	3.2	15.7	31.9	30.2	13.9	4.6	22.4	100.0	1108
TOT	15	92	382	749	665	335	133	22.4		2371
PCT	.6	3.9	16.1	31.6	28.0	14.1	5.6		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS) BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.0	1.4	1.9	13.4		7.4
NE	.0	.0	.0	3.2		8.0
E	.0	.0	1.9	4.6		7.7
SE	.0	.0	.0	.0		.0
S	.0	.0	.0	.0		.0
SW	.0	.0	.0	2.3		8.0
W	.0	6.9	13.9	7.9		5.9
NW	1.9	8.3	10.2	20.4		6.3
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	1.9	.0		6.0
TOT OBS	1	9	16	28	54	6.5
TOT PCT	1.9	16.7	29.6	51.9	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8) AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.0	.0	6.5	5.6	1.4	.0	.0	.0	.0	3.2	
NE	.0	.0	.0	.0	1.9	1.4	.0	.0	.0	.0	.0	
E	.0	.0	.0	1.9	1.9	2.8	.0	.0	.0	.0	.0	
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
S	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
SW	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	1.9	
W	.0	.0	.0	5.1	8.8	4.6	.0	.0	.0	.0	10.2	
NW	.0	.0	.0	10.6	13.4	.5	1.9	.0	.0	.0	14.4	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	1.9	.0	.0	.0	.0	.0	.0	
TOT OBS	1	9	16	28	54	65	1	0	0	0	16	54
TOT PCT	.0	.0	.0	24.1	33.3	11.1	1.9	.0	.0	.0	29.6	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)			VSBY (NM)			VSBY (NM)			VSBY (NM)		
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >30YD	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2
= OR >6500	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
= OR >5000	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
= OR >3500	1.9	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
= OR >2000	7.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
= OR >1000	22.2	44.4	46.3	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1
= OR >600	29.6	53.7	63.0	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4
= OR >300	29.6	53.7	63.0	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4
= OR >150	29.6	53.7	63.0	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4
= OR > 0	29.6	53.7	63.0	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4
TOTAL	16	29	34	38	38	38	38	38	38	38	38	38

TOTAL NUMBER OF OBSI 54

PCT FREQ NH <5/8 29.6

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
	.0	1.5	7.7	12.3	7.7	9.2	12.3	10.8	38.5	65

PERIOD: (PRIMARY) 1902-1977
(OVER-ALL) 1808-1977

NOVEMBER

AREA 0025 MAGELLAN STRAIT WEST
54.0S 73.9W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.4	.0	.0	.0	.0	.4	.4	1.1	.0	.0	2.1	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	1.4	.0	.0	1.4	
	TOT %	.4	.0	.0	.0	.0	.4	.4	2.5	.0	.0	3.5	
1<2	PCP	.0	.0	.0	.0	.0	.0	.5	2.3	.0	.0	2.8	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	1.4	.0	.0	1.4	
	TOT %	.0	.0	.0	.0	.0	.0	.5	3.7	.0	.0	4.2	
2<5	PCP	1.1	.0	.0	.0	.0	.7	1.8	4.2	.0	.0	7.7	
	NO PCP	.0	.0	.0	.0	.0	.7	.5	.2	.0	.0	1.4	
	TOT %	1.1	.0	.0	.0	.0	1.4	2.3	4.4	.0	.0	9.2	
5<10	PCP	1.8	.0	.0	.0	.0	3.9	3.5	3.5	.0	.0	12.7	
	NO PCP	3.2	1.4	2.1	.0	.0	2.8	6.5	14.3	.0	.0	30.3	
	TOT %	4.9	1.4	2.1	.0	.0	6.7	10.0	17.8	.0	.0	43.0	
10+	PCP	.0	.0	.0	.0	.0	.0	2.1	.7	.0	.0	2.8	
	NO PCP	3.5	1.6	2.5	.0	2.1	4.2	10.9	11.1	.0	1.4	37.3	
	TOT %	3.5	1.6	2.5	.0	2.1	4.2	13.0	11.8	.0	1.4	40.1	
TOT OBS													142
TOT PCT													100.0

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.3	.0	.0	.0	.0	.3	.3	2.2	.0	.0	3.1	
	TOT %	.3	.0	.0	.0	.0	.3	.3	2.2	.0	.0	3.1	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.5	.8	.0	.0	1.2	
	22+	.0	.0	.0	.3	.9	.0	.6	2.5	.0	.0	4.3	
	TOT %	.0	.0	.0	.3	.9	.0	1.1	3.2	.0	.0	5.6	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.6	
	4-10	.0	.0	.0	.0	.0	.6	.5	.2	.0	.0	1.2	
	11-21	.6	.0	.0	.0	.0	.0	1.3	1.3	.0	.0	3.7	
	22+	.9	.0	.0	.0	.9	.9	.0	2.2	.0	.0	4.9	
	TOT %	1.5	.0	.0	.0	.9	1.5	2.0	4.3	.0	.0	10.3	
5<10	0-3	.0	.0	.0	.0	.0	.2	.5	.0	.0	.0	.6	
	4-10	.0	.0	.0	.0	.0	2.3	3.1	.8	.0	.0	6.2	
	11-21	1.9	1.2	1.9	.0	.0	.6	3.2	8.3	.0	.0	17.3	
	22+	3.1	.0	.0	.0	.0	2.8	2.0	6.3	.0	.0	14.2	
	TOT %	4.9	1.2	1.9	.0	.0	5.9	8.8	15.6	.0	.0	38.3	
10+	0-3	.0	.0	1.1	.2	.3	1.5	.0	.6	.0	1.2	4.9	
	4-10	.3	.3	1.2	.0	.3	1.9	4.6	1.9	.0	.0	10.5	
	11-21	2.2	1.1	.3	.0	1.5	.9	6.3	3.3	.0	.0	16.0	
	22+	.6	.0	.0	.0	.0	.6	2.9	6.9	.0	.0	11.1	
	TOT %	3.1	1.4	2.6	.2	2.2	4.9	14.0	13.0	.0	1.2	42.6	
TOT OBS													162
TOT PCT													100.0

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PERIOD: (PRIMARY) 1902-1977
(OVER-ALL) 1808-1977

AREA 0025 MAGELLAN STRAIT WEST
54.05 73.9W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <3/8 ANY MGT	TOTAL OBS
00003	.0	.0	.0	23.1	30.8	15.4	.0	.0	.0	.0	69.2	30.8	13
06009	.0	.0	.0	28.6	21.4	14.3	.0	.0	.0	.0	64.3	35.7	14
12015	.0	.0	.0	12.5	43.8	6.3	.0	.0	.0	.0	62.5	37.5	16
18021	.0	.0	.0	26.7	26.7	6.7	13.3	.0	.0	.0	73.3	26.7	15
TOT	0	0	0	13	18	6	2	0	0	0	39	19	58
PCT	.0	.0	.0	22.4	31.0	10.3	3.4	.0	.0	.0	67.2	32.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	5.7	5.7	17.1	31.4	40.0	35
06009	.0	2.2	6.5	4.3	43.5	43.5	46
12015	.0	.0	7.9	15.8	39.5	36.8	38
18021	.0	4.0	2.0	6.0	44.0	44.0	50
TOT	0	5	9	17	68	70	169
PCT	.0	3.0	5.3	10.1	40.2	41.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOURL (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <3/8 AND 5+	TOTAL OBS
00003	.0	.0	25.0	50.0	25.0	12
06009	.0	.0	30.8	38.5	30.8	13
12015	.0	.0	33.3	40.0	26.7	15
18021	.0	.0	21.4	50.0	28.6	14
TOT	0	0	15	24	15	54
PCT	.0	.0	27.8	44.4	27.8	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
55/59	.0	.0	.0	.0	.0	.0	.6	.0	1	.6
50/54	.0	.0	1.8	2.4	1.8	1.2	.6	.0	13	7.6
45/49	.0	.0	.0	5.3	3.5	10.6	11.2	5.3	61	35.9
40/44	.0	.0	.0	.6	2.4	11.2	14.1	18.8	80	47.1
35/39	.0	.0	.0	.0	.0	2.4	1.8	4.7	15	8.8
TOT	0	0	3	14	13	43	48	49	170	100.0
PCT	.0	.0	1.8	8.2	7.6	25.3	28.2	28.8		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
55/59	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0
50/54	1.8	.6	.6	.0	.0	1.6	2.5	.6	.0	.0
45/49	3.8	.0	.6	.0	3.4	2.6	11.3	14.1	.0	.0
40/44	1.6	1.0	.7	.0	1.8	7.5	17.9	16.5	.0	.0
35/39	.0	1.3	2.2	.6	.6	2.1	1.8	.3	.0	.0
TOT	7.2	2.9	4.1	.6	5.7	13.8	33.5	32.1	.0	.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	53	50	48	43	37	34	31	42.9	313
06009	55	48	47	42	36	34	31	41.8	607
12015	55	50	49	43	37	34	33	43.0	301
18021	57	54	50	44	38	35	32	44.0	1055
TOT	57	52	49	43	37	34	31	43.1	2276

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	15.0	15.0	17.5	30.0	22.5	78	40		
06009	.0	6.7	8.9	24.4	17.8	42.2	82	43		
12015	.0	2.9	2.9	32.4	44.1	17.6	82	34		
18021	.0	13.5	5.8	26.9	25.0	28.8	78	52		
TOT	0	17	14	43	48	49	80	171		

PERIOD: (PRIMARY) 1902-1977
(OVER-ALL) 1868-1977

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AREA 0025 MAGELLAN STRAIT WEST
54.0S 73.9W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	33 36	37 40	41 44	45 48	49 52	53 56	TOT FOG	W FOG	WD FOG
9/10	.0	.0	.0	.0	.0	1.5	2	.0	1.5
7/8	.0	.0	.0	.0	.0	.7	1	.0	.7
5	.0	.0	.0	.7	.0	.7	2	.7	.7
4	.0	.0	.0	.0	.7	.0	1	.0	.7
3	.0	.0	1.5	3.0	.7	.0	7	.7	4.4
2	.0	.0	6.7	7.4	1.5	.0	21	.7	14.8
1	.0	.0	7.4	3.0	.0	.0	14	.7	9.6
0	.0	1.5	14.1	5.9	.0	.0	29	2.2	19.3
-1	.0	.7	4.4	3.7	.7	.0	13	.7	8.9
-2	.0	6.7	6.7	1.5	.0	.0	20	1.5	13.3
-3	.0	3.7	1.5	1.5	.0	.0	9	.7	5.9
-4	.0	2.2	1.5	.7	.0	.0	6	.0	4.4
-5	.7	3.0	.0	.7	.0	.0	6	.0	4.4
-6	.7	1.5	.7	.0	.0	.0	4	.7	2.2
TOTAL	2	26	60	38	5	4	135	12	123
PCT	1.5	19.3	44.4	28.1	3.7	3.0	100.0	8.9	91.1

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	2.5	.0	.0	.0	2.5	.0	.0	.8	.0	.0	.0	.8
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	10.0	.0	.0	.0	10.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	3.3	.0	.0	3.3	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	5.0	.0	5.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	12.5	3.3	5.0	.0	20.8	.0	.0	.8	.0	.0	.0	.8

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	3.3	.0	.0	.0	3.3	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	3.3	.0	.0	.0	3.3	.0	.0	.0	.0	.0	.0	.0

PERIOD: (OVER-ALL) 1963-1977

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TABLE 18 (CONT)AREA 0025 MAGELLAN STRAIT WEST
54.0S 73.9W

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.3	.0	.0	3.3	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.3	.0	.0	3.3	.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	3.3	6.7	.0	.0	.0	10.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	6.7	3.3	.0	.0	.0	10.0	.0
5-6	.0	.0	6.7	.0	.0	.0	6.7	.0	.0	.0	3.3	.0	.0	3.3	.0
7	.0	.0	15.8	.0	.0	.0	15.8	.0	.0	.8	.0	.0	.0	.8	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.3	.0	.0	.0	3.3	.0
10-11	.0	.0	.0	5.8	.0	.0	5.8	.0	.0	3.3	.8	.0	.0	4.2	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11.7	.0	11.7	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	3.3	29.2	5.8	.0	.0	38.3	.0	6.7	7.5	7.5	11.7	.0	33.3	100.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	3.3	10.0	.0	.0	.0	13.3	.0
3-4	.0	6.7	6.7	.0	.0	.0	13.3	.0
5-6	.0	.0	16.7	6.7	.0	.0	23.3	.0
7	.0	.0	16.7	.0	.0	.0	16.7	.0
8-9	.0	.0	.0	3.3	.0	.0	3.3	.0
10-11	.0	.0	3.3	10.0	.0	.0	13.3	.0
12	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	16.7	.0	16.7	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	10.0	53.3	20.0	16.7	.0	100.0	30

PERIOD: (OVER-ALL) 1958-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.0	3.1	17.2	.0	1.6	.0	1.6	4.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	18	5
6-7	.0	.0	3.1	1.6	.0	1.6	4.7	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8	8
8-9	.0	.0	1.6	1.6	4.7	3.1	3.1	3.1	7.8	3.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	18	11
10-11	.0	.0	.0	.0	1.6	6.3	4.7	.0	10.9	3.1	1.6	.0	.0	.0	.0	.0	.0	.0	.0	18	12
12-13	.0	.0	.0	.0	.0	.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	10
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	2
INDET	.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	9
TOTAL	.0	3	14	2	5	7	10	6	12	4	1	0	0	0	0	0	0	0	0	64	
PCT	.0	4.7	21.9	3.1	7.8	10.9	13.6	9.4	18.8	6.3	1.6	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

DECEMBER

PERIOD: (PRIMARY) 1898-1976
(OVER-ALL) 1860-1976

AREA 0025 MAGELLAN STRAIT WEST
54.25 73.6W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FGG PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	.0	.0	10.8	.0	.0	.0	.0	10.8	8.1	.0	5.4	.0	8.1	.0	67.6
NE	18.2	.0	18.2	.0	.0	.0	.0	36.4	.0	.0	.0	.0	.0	.0	63.6
E	12.5	.0	.0	.0	.0	.0	.0	12.5	.0	.0	.0	.0	.0	.0	87.5
SE	.0	.0	.0	.0	.0	.0	.0	.0	22.2	.0	.0	.0	.0	.0	77.8
S	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SW	.0	4.9	9.9	.0	.0	.0	2.5	17.3	2.5	.0	.0	.0	4.9	.0	75.3
W	5.0	4.0	3.0	.0	.0	.0	.0	11.1	3.0	.0	6.0	.0	2.0	.0	77.9
NW	18.9	6.7	7.8	.0	.0	.0	.0	33.3	2.8	.0	5.6	.0	7.2	.0	51.1
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	8.8	3.4	6.1	.0	.0	.0	.7	18.9	3.4	.0	4.1	.0	4.1	.0	69.6
TOT OBS:	148														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FGG PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00603	8.1	5.4	10.8	.0	.0	.0	.0	24.3	5.4	.0	2.7	.0	5.4	.0	62.2
06009	8.1	.0	5.4	.0	.0	.0	.0	13.5	2.7	.0	2.7	.0	.0	.0	81.1
12615	9.5	4.8	9.5	.0	.0	.0	.0	23.8	.0	.0	4.8	.0	7.1	.0	64.3
18621	15.6	4.4	2.2	.0	.0	.0	2.2	24.4	6.7	.0	4.4	.0	2.2	.0	62.2
TOT PCT	10.6	3.7	6.8	.0	.0	.0	.6	21.7	3.7	.0	3.7	.0	3.7	.0	67.1
TOT OBS:	161														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.3	2.1	2.8	2.3	1.1	.3		8.9	20.2	7.0	12.5	10.7	8.9	8.8	8.3	8.8	9.3	
NE	.3	1.4	1.3	.4	.1	.*		3.5	12.9	4.3	.0	4.1	2.8	4.0	4.2	3.4	2.5	
E	.4	1.1	.7	.2	.0	.0		2.3	10.1	1.6	.0	2.4	2.4	2.6	12.5	2.5	1.9	
SE	.5	1.2	.9	.2	.1	.0		2.9	11.3	1.6	.0	2.1	3.3	2.8	16.7	3.9	1.7	
S	.8	1.8	2.0	.8	.3	.1		5.6	14.0	7.6	6.3	6.4	5.6	4.1	.0	6.0	3.3	
SW	.7	4.1	6.2	4.2	1.0	.2		16.3	17.6	15.3	12.5	15.6	23.1	16.9	.0	15.1	14.9	
W	.7	4.4	11.3	7.7	3.5	.5		28.1	20.6	26.1	27.5	24.4	26.0	27.0	33.3	30.3	30.1	
NW	.9	5.4	12.1	8.2	3.5	.9		31.0	20.6	34.3	18.8	33.0	27.3	32.8	25.0	28.6	35.5	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	1.3							1.3	.0	2.1	12.5	1.4	.7	1.0	.0	1.3	.8	
TOT OBS	133	493	849	547	215	46	2283		18.7	288	8	295	274	295	6	864	253	
TOT PCT	5.8	21.6	37.2	24.0	9.4	2.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12
N	1.1	2.9	2.4	1.8	.7		8.9	20.2	7.2	9.8	8.8	8.9	
NE	.9	1.6	.7	.2	.1		3.5	12.9	4.1	3.5	4.0	3.2	
E	.8	1.1	.3	.1	.0		2.3	10.1	1.6	2.4	2.8	2.4	
SE	1.0	1.2	.6	.1	.1		2.9	11.3	1.6	2.7	3.1	3.4	
S	1.5	2.0	1.5	.4	.2		5.6	14.0	7.6	6.0	4.0	5.4	
SW	2.4	5.4	5.2	2.8	.5		16.3	17.6	15.2	19.2	16.5	15.1	
W	2.4	8.0	10.5	5.3	1.9		28.1	20.6	26.4	25.2	27.2	30.3	
NW	2.4	10.1	10.4	5.8	2.3		31.0	20.6	33.9	30.2	32.6	30.2	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	1.3						1.3	.0	2.4	1.1	1.0	1.2	
TOT OBS	317	735	724	377	130	2283		18.7	296	569	301	1117	
TOT PCT	13.9	32.2	31.7	16.5	5.7		100.0		100.0	100.0	100.0	100.0	

DECEMBER

PERIOD: (PRIMARY) 1898-1976
(OVER-ALL) 1860-1976

AREA 0025 MAGELLAN STRAIT WEST
54.25 73.6W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOURL	CALM	1-3	4-10	11-21	22-33	34-47	48+	MEAN	PCT FREQ	TOTAL OBS
0000	2.4	5.7	20.3	39.2	22.6	8.8	1.0	17.7	100.0	296
0600	1.1	4.6	22.7	34.3	25.3	9.7	2.3	19.0	100.0	569
1200	1.0	4.3	21.6	39.5	23.3	8.3	2.0	18.3	100.0	301
1800	1.2	4.3	21.4	37.5	23.8	9.8	2.1	18.9	100.0	1117
TOT	29	104	493	849	547	215	46	18.7		2283
PCT	1.3	4.6	21.6	37.2	24.0	9.4	2.0		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.0	.0	1.9	4.9		7.2
NE	.0	.0	1.0	2.4		7.4
E	.0	.0	.0	3.4		8.0
SE	.0	.0	2.9	.0		7.0
S	.0	1.5	.0	1.2		5.6
SW	1.0	3.9	8.3	3.6		5.4
W	2.7	9.5	12.1	12.6		5.7
NW	.2	1.7	6.8	15.5		7.2
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	.0	2.9		8.0
TOT OBS	4	17	34	48	103	6.3
TOT PCT	3.9	16.5	33.0	46.6	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH > 4/8)
AND OCCURRENCE OF NH < 5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.0	.7	2.9	1.0	.5	.0	.0	.0	.7	1.0	
NE	.0	.0	.0	.2	1.0	1.2	.0	.0	.0	.0	1.0	
E	.0	.0	.0	1.7	.0	1.7	.0	.0	.0	.0	.0	
SE	.0	.0	1.0	.0	1.0	.0	1.0	.0	.0	.0	.0	
S	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	1.9	
SW	.0	.0	1.0	.0	3.6	5.1	.5	.0	.0	.0	6.6	
W	1.0	.0	.0	1.5	5.1	9.5	.5	.0	.0	1.0	18.4	
NW	1.9	.0	1.2	1.5	7.0	5.3	.0	.0	.0	.2	7.0	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	.0	1.9	1.0	.0	.0	.0	.0	
TOT OBS	3	0	4	8	20	26	3	0	0	2	37	
TOT PCT	2.9	.0	3.9	7.8	19.4	25.2	2.9	.0	.0	1.9	35.9	103

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH > 4/8) AND VSBY (NM)

CEILING (FEET)	= OR >10	= OR >5	= OR >2	VSBY (NM) = OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8
= OR >5000	.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8
= OR >3500	1.8	3.6	4.5	4.5	4.5	4.5	4.5	4.5
= OR >2000	12.5	26.8	29.5	29.5	29.5	29.5	29.5	29.5
= OR >1000	20.5	43.8	49.1	49.1	49.1	49.1	49.1	49.1
= OR >600	22.3	50.9	57.1	57.1	57.1	57.1	57.1	57.1
= OR >300	22.3	51.8	59.8	59.8	59.8	60.7	60.7	60.7
= OR >150	22.3	51.8	60.7	60.7	60.7	61.6	61.6	61.6
= OR >0	22.3	51.8	61.6	62.5	62.5	65.2	65.2	65.2
TOTAL	25	58	69	70	70	73	73	73

TOTAL NUMBER OF OBS 112

PCT FREQ NH < 5/8 34.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
.8	2.5	10.1	13.4	6.7	9.2	10.9	8.4	34.5	3.4	119

PERIOD: (PRIMARY) 1898-1976
(OVER-ALL) 1860-1976

DECEMBER

AREA 0025 MAGELLAN STRAIT WEST
54.25 73.6W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.7	
	NO PCP	.0	.7	.0	.7	.0	.0	.7	.0	.0	.0	2.0	
	TOT %	.0	.7	.0	.7	.0	.0	.7	.7	.0	.0	2.7	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.3	1.0	.0	.0	1.4	
	NO PCP	.0	.0	.0	.0	.0	.0	.7	.7	.0	.0	1.4	
	TOT %	.0	.0	.0	.0	.0	.0	1.0	1.7	.0	.0	2.7	
1<2	PCP	.0	.0	.0	.0	.0	.0	1.0	2.4	.0	.0	3.4	
	NO PCP	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.7	
	TOT %	.0	.0	.0	.0	.0	.0	1.7	2.4	.0	.0	4.1	
2<5	PCP	.7	.7	.0	.0	.0	.7	1.0	1.7	.0	.0	4.7	
	NO PCP	.5	.0	.3	1.0	.0	.0	.0	1.5	.0	.0	3.4	
	TOT %	1.2	.7	.3	1.0	.0	.7	1.0	3.2	.0	.0	8.1	
5<10	PCP	.0	.7	.7	.0	.0	.7	1.0	3.7	.0	.0	6.8	
	NO PCP	3.4	.2	1.5	.3	1.2	4.9	10.3	7.9	.0	.7	30.4	
	TOT %	3.4	.8	2.2	.3	1.2	5.6	11.3	11.7	.0	.7	37.2	
10+	PCP	.0	.0	.0	.0	.0	1.0	.3	.7	.0	.0	2.0	
	NO PCP	1.7	1.5	2.9	1.0	.7	6.4	17.6	10.1	.0	1.4	43.2	
	TOT %	1.7	1.5	2.9	1.0	.7	7.4	17.9	10.8	.0	1.4	45.3	
TOT OBS													148
TOT PCT		6.3	3.7	5.4	3.0	1.9	13.7	33.6	30.4	.0	2.0	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.3	.0	.0	.0	.0	.0	1.3	1.0	.0	.0	2.6	
	22+	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.6	
	TOT %	.3	.6	.0	.6	.0	.0	1.3	1.0	.0	.0	3.9	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	1.3	
	22+	.0	.0	.0	.0	.0	.0	1.0	1.6	.0	.0	2.6	
	TOT %	.0	.0	.0	.0	.0	.0	1.0	2.9	.0	.0	3.9	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.6	
	22+	.0	.0	.0	.0	.0	.0	1.0	2.3	.0	.0	3.2	
	TOT %	.0	.0	.0	.0	.0	.0	1.6	2.3	.0	.0	3.9	
2<5	0-3	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.6	
	4-10	.6	.0	.3	.3	.0	.0	.0	.0	.0	.0	1.3	
	11-21	.5	.6	.0	.0	.0	.6	.5	2.3	.0	.0	4.5	
	22+	.0	.0	.0	.0	.0	.0	.5	1.5	.0	.0	1.9	
	TOT %	1.1	.6	.3	1.0	.0	.6	1.0	3.7	.0	.0	8.4	
5<10	0-3	.0	.0	.6	.0	.0	.0	.6	.0	.0	.6	1.9	
	4-10	.0	.0	1.0	.3	.3	1.0	1.8	.2	.0	.0	4.3	
	11-21	2.7	.8	.5	.0	.3	3.2	4.8	8.2	.0	.0	20.6	
	22+	.5	.0	.0	.0	.5	1.1	3.5	2.7	.0	.0	8.4	
	TOT %	3.2	.8	2.1	.3	1.1	5.3	10.8	11.1	.0	.6	35.5	
10+	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	1.3	
	4-10	.3	1.3	1.9	.6	.5	2.9	6.3	3.5	.0	.0	17.4	
	11-21	1.3	.2	.8	.3	.0	2.9	7.1	4.2	.0	.0	16.8	
	22+	.0	.0	.0	.0	.6	2.1	3.7	2.6	.0	.0	9.0	
	TOT %	1.6	1.5	2.7	1.0	1.1	7.9	17.1	10.3	.0	1.3	44.5	
TOT OBS													155
TOT PCT		6.3	3.5	5.2	2.9	2.3	13.9	32.7	31.3	.0	1.9	100.0	

DECEMBER

PERIOD: (PRIMARY) 1898-1976
(OVER-ALL) 1860-1976AREA 0025 MAGELLAN STRAIT WEST
54.25 73.6W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	3.2	3.2	.0	9.7	22.6	19.4	3.2	.0	.0	.0	61.3	38.7	31
06009	.0	.0	.0	4.0	20.0	32.0	.0	.0	.0	.0	56.0	44.0	25
12015	6.7	.0	10.0	6.7	13.3	30.0	.0	.0	.0	6.7	73.3	26.7	30
18021	3.7	.0	3.7	11.1	22.2	18.5	7.4	.0	.0	.0	66.7	33.3	27
TOT	4	1	4	9	22	28	3	0	0	2	73	40	113
PCT	3.5	.9	3.5	8.0	19.5	24.8	2.7	.0	.0	1.8	64.6	35.4	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	2.5	2.5	2.5	12.5	32.5	47.5	40
06009	.0	.0	5.4	8.1	40.5	45.9	37
12015	6.8	4.5	.0	11.4	36.4	40.9	44
18021	4.3	6.4	6.4	10.6	36.2	36.2	47
TOT	6	6	6	18	61	71	168
PCT	3.6	3.6	3.6	10.7	36.3	42.3	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOURL (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	3.2	6.5	22.6	38.7	38.7	31
06009	.0	.0	12.0	48.0	40.0	25
12015	6.7	16.7	26.7	46.7	26.7	30
18021	3.8	7.7	26.9	42.3	30.8	26
TOT	4	9	25	49	38	112
PCT	3.6	8.0	22.3	43.8	33.9	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
55/59	.0	.0	.7	.7	.7	1.4	.0	.0	5	3.4
50/54	.0	.0	.7	1.4	6.8	4.7	5.4	2.7	32	21.6
45/49	.0	.0	.0	2.7	2.7	9.5	11.5	22.3	72	48.6
40/44	.0	.0	.0	.0	.7	6.8	8.1	10.1	38	25.7
30/34	.0	.0	.0	.0	.0	.0	.0	.7	1	.7
TOTAL	0	0	2	7	16	33	37	53	148	100.0
PCT	.0	.0	1.4	4.7	10.8	22.3	25.0	35.8		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.2	1.2	.0	.0	.0	.0	1.4	.0	.0	.7
4.1	1.5	.5	1.4	.7	2.4	5.4	5.7	.0	.0	.0
4.1	1.0	1.9	.7	.5	3.7	14.7	22.1	.0	.0	.0
.8	1.4	.0	.0	.0	3.7	9.3	9.1	.0	1.4	.0
.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
9.0	4.7	3.5	2.0	1.2	9.8	30.7	37.0	.0	2.0	.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	59	55	52	46	40	37	37	45.7	282
06009	57	52	50	44	39	37	36	44.2	560
12015	57	54	51	45	39	37	34	45.2	295
18021	59	56	52	46	41	39	33	46.3	1081
TOT	59	55	52	46	40	37	33	45.6	2228

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	8.6	5.7	20.0	31.4	34.3	82	35		
06009	.0	3.2	9.7	32.3	9.7	45.2	84	31		
12015	.0	4.5	4.5	18.2	38.6	34.1	85	44		
18021	.0	6.4	19.1	19.1	23.4	31.9	80	47		
TOT	0	9	16	34	42	56	82	157		

DECEMBER

PERIOD: (PRIMARY) 1898-1976
(OVER-ALL) 1860-1976

TABLE 17

AREA 0025 MAGELLAN STRAIT WEST
54.25 73.6WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37 40	41 44	45 48	49 52	53 56	57 60	TOT	N FOG	WD FOG
11/13	.0	.0	.0	.0	.0	.8	1	.0	.8
9/10	.0	.0	.8	.8	1.6	.0	4	.0	3.1
7/8	.0	.0	.0	.0	1.6	.0	2	.0	1.6
6	.0	.0	.8	3.9	2.3	.8	10	.0	7.8
5	.0	.0	.0	1.6	.8	.0	3	.0	2.3
4	.0	.0	2.3	3.1	.8	.0	8	.0	6.3
3	.0	.0	3.1	3.1	.0	.0	8	.0	6.3
2	.0	.8	4.7	7.0	.0	.0	16	.0	12.5
1	.8	1.6	7.8	4.7	.8	.0	20	1.6	14.1
0	.0	5.5	3.9	4.7	.0	.0	18	3.1	10.9
-1	.0	6.3	4.7	.8	.0	.0	15	.0	11.7
-2	.0	5.5	4.7	.0	.0	.0	13	.0	10.2
-3	.0	.8	1.6	.0	.0	.0	3	.0	2.3
-4	.0	.0	2.3	.0	.0	.0	3	.0	2.3
-6	.0	.8	.0	.0	.0	.0	1	.0	.8
-7/-8	.8	1.6	.0	.0	.0	.0	3	.0	2.3
TOTAL	2	29	47	38	10	2	128	6	122
PCT	1.6	22.7	36.7	29.7	7.8	1.6	100.0	4.7	95.3

PERIOD: (OVER-ALL) 1963-1976

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.0	.0	1.9	.0	.0	.0	.0	1.9
1-2	.0	.0	.0	.0	.0	.0	.0	.0	1.9	.5	.0	.0	.0	2.4
3-4	.0	.0	1.9	.0	.0	.0	1.9	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	1.4	.0	.0	.0	1.4	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	1.4	.0	1.4	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	3.3	.0	1.4	.0	4.7	.0	3.8	.5	.0	.0	.0	4.2

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	1.9	.0	.0	.0	.0	.0	1.9	1.9	1.9	.0	.0	.0	.0	3.8
1-2	.0	1.9	1.4	.0	.0	.0	3.3	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	.0	1.9
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.9	1.9	1.4	.0	.0	.0	5.2	1.9	1.9	.0	.0	1.9	.0	5.7

PERIOD: (OVER-ALL) 1963-1976

DECEMBER

AREA 0025 MAGELLAN STRAIT WEST
54.2S 73.6W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	1.9	.0	.0	.0	.0	.0	1.9
1-2	.0	.0	.0	.0	.0	.0	.0	.0	1.9	1.9	.0	.0	.0	.0	3.8
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	1.9	.0	1.9	.0	.0	.0	3.8
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	.0	.0	.0	.0	1.9
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.5
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	5.7	3.8	2.4	.0	.0	.0	11.8

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	1.9	2.8	.0	.0	.0	.0	4.7	.0	2.8	.0	.0	.0	.0	.0	2.8
1-2	.0	4.7	3.3	.0	.0	.0	8.0	.0	2.8	8.0	.0	.0	.0	.0	10.8
3-4	.0	1.4	1.9	1.4	.0	.0	4.7	.0	2.4	.0	.5	.0	.0	.0	2.8
5-6	.0	.0	3.3	1.9	.0	.0	5.2	.0	.0	6.6	.0	.0	.0	.0	6.6
7	.0	.0	1.9	1.9	.0	.0	3.8	.0	.0	1.9	.0	.0	.0	.0	3.8
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	3.3	1.4	.0	.0	4.7	.0	.0	.5	1.9	1.9	1.9	6.1	6.1
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.9	9.0	13.7	6.6	.0	.0	31.1	.0	8.0	17.0	4.2	2.4	1.9	33.5	96.2

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	9.4	11.3	.0	.0	.0	.0	.0	20.8
1-2	.0	13.2	15.1	.0	.0	.0	.0	28.3
3-4	.0	3.8	3.8	1.9	.0	.0	.0	9.4
5-6	.0	1.9	11.3	3.8	.0	.0	.0	17.0
7	.0	.0	3.8	3.8	.0	.0	.0	7.5
8-9	.0	.0	1.9	.0	.0	.0	.0	1.9
10-11	.0	.0	3.8	3.8	1.9	.0	.0	13.2
12	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	1.9	.0	.0	1.9
17-19	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	9.4	30.2	39.6	13.2	5.7	1.9	100.0	53

PERIOD: (OVER-ALL) 1954-1976

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT	
<6	4.9	9.8	6.1	2.4	1.2	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	21	3
6-7	.0	2.4	7.3	4.9	2.4	.0	2.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	16	5
8-9	.0	.0	4.9	1.2	1.2	3.7	.0	.0	2.4	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	12	8
10-11	.0	3.7	2.4	.0	2.4	.0	1.2	.0	2.4	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	7
12-13	.0	.0	4.9	.0	1.2	.0	.0	.0	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	6
>13	.0	.0	.0	1.2	.0	.0	1.2	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	9
INDET	14.6	.0	.0	.0	.0	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	1
TOTAL	16	13	21	8	7	3	6	0	5	3	0	0	0	0	0	0	0	0	0	0	82	5
PCT	19.5	15.9	25.6	9.8	8.5	3.7	7.3	.0	6.1	3.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

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PERIOD: (PRIMARY) 1898-1978
(OVER-ALL) 1854-1978

AREA 0025 MAGELLAN STRAIT WEST
53.9S 73.9W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA									
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA		
N	14.6	6.8	8.7	.0	.4	.0	.0	29.3	6.7	.0	10.2	.4	.9	.0	52.6		
NE	15.2	5.8	10.8	.0	1.3	.0	.0	33.0	.0	.0	8.0	.0	.0	.0	59.0		
E	13.6	.7	5.2	.0	.0	.0	.9	20.4	6.0	.0	6.7	.0	.0	.0	67.0		
SE	8.7	.4	1.3	.0	.0	.0	.0	10.4	3.7	.0	7.5	.0	.0	.0	70.1		
S	3.0	4.8	1.9	.0	3.8	.0	.9	14.5	3.7	.0	8.9	.0	.0	.0	72.3		
SW	4.1	5.7	3.5	.0	8.2	.0	2.0	23.6	3.8	.0	10.8	.0	.4	.0	61.4		
W	10.0	8.4	4.3	.0	2.3	.0	2.0	26.5	5.7	.2	4.7	1.3	.2	.2	61.2		
NW	13.8	10.7	6.5	.0	.9	.0	.8	32.2	5.6	.0	7.0	.1	.7	.3	54.2		
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
CALM	.0	.0	1.7	.0	.0	.0	.0	1.7	1.2	.0	1.2	.0	.0	.0	79.3		
TOT PCT	10.8	7.4	5.3	.0	2.0	.0	1.2	26.4	5.1	.1	8.3	.3	.4	.2	59.4		
TOT OBS:	2005																

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA									
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA		
00003	9.7	7.4	5.8	.0	2.3	.0	.9	25.8	5.9	.0	6.9	.0	.5	.2	60.6		
06009	17.9	7.1	5.6	.0	2.0	.0	1.5	26.6	4.0	.2	9.4	.0	.1	.3	59.4		
12015	11.0	7.0	6.4	.0	.9	.0	.7	25.9	7.3	.0	7.9	.8	.6	.2	57.4		
18021	11.5	7.9	4.3	.0	2.6	.0	1.3	27.1	3.5	.0	8.1	.4	.3	.2	60.5		
TOT PCT	10.7	7.4	5.5	.0	2.1	.0	1.1	26.4	4.9	*	8.1	.3	.4	.2	59.6		
TOT OBS:	2101																

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18
N	.3	1.7	2.5	2.1	1.1	.4		8.2	21.4		7.5	7.3	8.3	7.3	8.2	12.4	8.8
NE	.2	1.3	1.4	.6	.2	*		3.7	14.8		4.0	.8	3.7	3.4	3.4	3.2	3.7
E	.3	1.2	.9	.3	.1	*		2.9	12.3		3.1	2.5	2.8	2.8	2.7	3.9	2.9
SE	.3	1.4	1.2	.5	.2	*		3.7	13.5		4.1	8.6	3.7	3.5	3.6	7.5	3.4
S	.4	2.0	2.4	1.5	.7	.2		7.1	17.9		7.4	9.6	7.6	7.6	6.8	5.4	7.0
SW	.5	3.6	6.1	5.2	2.7	1.0		19.1	22.0		19.2	12.8	18.7	21.0	19.4	8.3	18.2
W	.5	3.9	9.0	8.5	4.6	1.6		28.2	23.7		26.9	17.2	25.7	27.4	28.5	20.9	29.9
NW	.5	3.3	8.1	7.9	4.8	1.7		26.1	24.8		26.6	23.4	28.1	26.1	26.1	21.8	25.0
VAR	1.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0
CALM	1.0							1.0	.0		1.1	1.0	1.3	1.0	1.1	.0	1.0
TOT OBS							24209		21.8		3274	58	3332	3038	3174	55	8554
TOT PCT	4.1	18.3	31.7	26.7	14.3	5.0		100.0			100.0	83.3	100.0	100.0	100.0	83.3	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	06	12	18
N	1.0	2.3	2.4	1.6	.8		8.2	21.4	7.6	7.8	8.4	8.6
NE	.8	1.5	1.0	.4	.1		3.7	14.8	3.9	3.5	3.4	3.8
E	.9	1.2	.6	.2	*		2.9	12.3	3.1	2.8	2.8	2.9
SE	.9	1.4	.9	.3	.1		3.7	13.5	4.2	3.6	3.7	3.5
S	1.1	2.5	2.0	1.1	.5		7.1	17.9	7.4	7.6	6.8	6.9
SW	1.8	5.2	5.9	4.0	2.0		19.1	22.0	19.1	19.8	19.3	18.6
W	1.9	6.8	9.5	6.6	3.3		28.2	23.7	26.8	26.5	28.5	29.4
NW	1.5	5.9	8.6	6.6	3.5		26.1	24.8	26.6	27.2	26.1	25.4
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	1.0						1.2	1.2	1.2	1.1	.9	.9
TOT OBS						24209		21.8	3332	6370	3229	11278
TOT PCT	10.9	26.9	30.9	20.9	10.4		100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1898-1978
(COVER-ALL) 1854-1978

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)							PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47	48+	MEAN		
0000Z	1.2	3.2	20.1	33.6	24.6	12.4	4.8	20.9	100.0	3332
0600Z	1.2	2.9	18.7	31.6	26.2	13.9	5.3	21.9	100.0	6370
1200Z	1.1	2.9	19.5	31.0	26.8	14.0	4.8	21.6	100.0	3229
1800Z	.9	3.2	17.1	31.3	27.6	15.1	4.8	22.2	100.0	11278
TOT								21.8		24209
PCT	1.0	3.1	18.3	31.7	26.7	14.3	5.0		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 8+ OBS	TOTAL OBS	MEAN CLOUD COVER
N	1.0	.9	2.9	8.5		6.8
NE	.6	.1	.8	1.6		5.1
E	.5	.3	.8	2.6		6.8
SE	.0	.5	1.5	2.1		5.9
S	.4	.7	2.4	2.1		5.2
SW	1.0	1.2	4.1	4.8		6.3
W	1.7	3.8	10.9	9.7		6.1
NW	1.9	2.4	7.9	17.6		6.7
VAR	.0	.0	.0	.0		.0
CALM	.1	.5	.7	1.5		4.5
TOT OBS					1027	6.5
TOT PCT	7.2	10.4	32.0	50.3	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
.1	.4	1.1	2.1	3.8	1.9	.6	.0	.0	.0	.1	3.3	
.1	.0	.1	.6	.5	.5	.0	.0	.0	.0	.1	1.2	
.0	.2	*	.9	1.0	.4	.1	.4	.0	.2	1.0		
.0	.1	.2	.7	1.4	.2	.3	.1	.0	.1	1.1		
*	.4	.1	.6	1.8	.7	.3	.0	.0	.0	1.7		
*	.4	.7	1.8	3.0	1.6	.4	.3	.0	.0	3.0		
.2	.2	1.2	3.3	5.9	3.8	1.2	.5	.1	.1	9.6		
.5	.4	1.4	4.5	10.0	3.3	1.0	.3	.0	.0	18.2		
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
.1	.0	.1	.1	.3	.7	.6	.2	.0	.0	.6		
1.1	2.0	5.0	14.5	27.7	13.1	4.3	1.8	.1	.6	29.7	1027	
											100.0	

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)		
	>10	>5	>2
= OR >6500	.3	.6	.6
= OR >5000	1.8	2.4	2.4
= OR >3500	3.7	6.2	6.8
= OR >2000	9.7	17.6	19.6
= OR >1000	20.1	40.3	45.7
= OR >600	25.6	50.5	58.7
= OR >300	27.3	54.6	63.4
= OR >150	27.7	55.7	65.3
= OR >0	27.8	56.1	65.9

TOTAL NUMBER OF OBS: 1067

PCT FREQ NH <5/8: 29.7

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
2.7	4.2	7.3	8.5	6.2	8.0	12.5	11.2	38.4	1.0	1147

PERIOD: (PRIMARY) 1898-1978
(OVER-ALL) 1854-1978

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.1	.0	.0	.0	.0	.0	*	.2	.0	.0	.3	
	NO PCP	.0	.1	.1	.1	.1	.1	.1	.1	.0	*	.5	
	TOT %	.1	.1	.1	.1	.1	.1	.1	.3	.0	*	.8	
1/2<1	PCP	.2	*	.1	*	*	.1	.3	.7	.0	.0	1.4	
	NO PCP	.5	.0	*	.0	.0	.1	.3	.6	.0	.0	1.5	
	TOT %	.7	*	.1	*	*	.2	.3	1.3	.0	.0	2.9	
1<2	PCP	.3	*	.1	.1	.1	.3	.5	.8	.0	.0	2.2	
	NO PCP	.2	*	*	.1	.0	.1	.2	.2	.0	.0	.8	
	TOT %	.5	.1	.1	.2	.1	.3	.8	1.0	.0	.0	3.0	
2<5	PCP	.9	.4	.1	.2	.1	.4	1.0	2.2	.0	.1	5.3	
	NO PCP	.4	.2	.2	.3	.1	.5	.9	.9	.0	.0	3.4	
	TOT %	1.3	.6	.3	.4	.1	1.0	1.9	3.1	.0	.1	8.7	
5<10	PCP	2.0	.6	.6	.4	.8	1.9	4.0	5.1	.0	.0	15.2	
	NO PCP	4.3	.8	1.7	1.5	2.8	4.3	7.4	11.5	.0	.3	34.5	
	TOT %	6.3	1.3	2.3	1.8	3.6	6.2	11.4	16.5	.0	.3	49.8	
10+	PCP	.2	.1	*	.0	.1	.1	.5	.7	.0	.0	1.8	
	NO PCP	4.1	1.7	2.0	1.6	2.8	4.3	8.6	6.8	.0	1.0	32.9	
	TOT %	4.3	1.8	2.0	1.6	2.9	4.4	9.1	7.5	.0	1.0	34.7	
TOT OBS													
TOT PCT													
		13.1	3.9	4.9	4.2	6.9	12.2	23.9	29.6	.0	1.3	100.0	1980

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	*	
	4-10	*	.1	.0	.0	*	.0	.0	*	.0	*	*	
	11-21	*	.0	.1	.0	.0	.0	.1	.1	.0	.0	.3	
	22+	*	.0	.0	.1	.0	*	.1	.2	.0	.0	.4	
	TOT %	.1	.1	.1	.1	*	*	.2	.3	.0	*	.9	
1/2<1	0-3	*	.0	.0	.0	.0	.0	.0	*	.0	.0	*	
	4-10	.2	*	.1	*	.0	.1	.1	.2	.0	.0	.7	
	11-21	.1	.0	*	.0	.0	.1	.2	.3	.0	.0	.8	
	22+	.4	*	.0	.0	*	*	.3	.8	.0	.0	1.6	
	TOT %	.7	*	.1	*	*	.3	.5	1.3	.0	.0	3.1	
1<2	0-3	*	*	.0	.0	.0	.0	.0	.0	.0	.0	*	
	4-10	*	.0	*	.2	.1	.1	.1	*	.0	.0	.5	
	11-21	.2	.1	.1	*	.0	.2	.3	.1	.0	.0	.9	
	22+	.3	.0	.0	*	.1	.1	.5	.9	.0	.0	2.0	
	TOT %	.6	.1	.1	.2	.2	.3	.9	1.1	.0	.0	3.5	
2<5	0-3	.0	.0	.0	.1	*	.1	.1	.1	.0	*	.4	
	4-10	.2	.2	.2	.3	*	.2	.4	.4	.0	.0	1.7	
	11-21	.3	.2	.1	.1	.1	.4	.7	1.0	.0	.0	3.0	
	22+	.8	.2	.0	*	.1	.2	.6	1.8	.0	.0	3.8	
	TOT %	1.4	.6	.3	.5	.2	.9	1.8	3.2	.0	*	8.9	
5<10	0-3	.1	.1	.3	.1	.1	*	.1	*	.0	.3	1.1	
	4-10	1.0	.4	.7	.6	1.0	1.9	1.1	1.4	.0	.0	8.2	
	11-21	2.3	.6	.8	.6	1.1	2.3	4.8	7.0	.0	.0	19.4	
	22+	2.5	.2	.2	.3	1.1	1.6	4.7	6.9	.0	.0	17.3	
	TOT %	5.8	1.3	2.0	1.6	3.2	5.8	10.7	15.3	.0	.3	46.0	
10+	0-3	.1	.1	.3	.2	.3	.4	.2	.3	.0	.9	2.8	
	4-10	1.1	.9	1.1	.6	1.4	1.5	2.7	1.8	.0	.0	11.2	
	11-21	1.8	.7	.5	.5	1.1	2.1	4.5	3.4	.0	.0	14.5	
	22+	1.3	.2	.2	.4	.7	1.2	2.4	2.8	.0	.0	9.1	
	TOT %	4.3	2.0	2.0	1.7	3.5	5.1	9.7	8.4	.0	.9	37.6	
TOT OBS													
TOT PCT													
		12.9	4.0	4.6	4.0	7.2	12.5	23.9	29.7	.0	1.3	100.0	2193

PERIOD: (PRIMARY) 1898-1978
(OVER-ALL) 1854-1978

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <3/8 ANY MGT	TOTAL OBS
00603	1.6	3.6	3.8	14.4	29.2	11.8	1.7	1.3	.2	.2	68.2	31.8	286
06609	.5	1.5	7.8	11.9	27.8	13.5	2.2	2.5	.0	.6	68.3	31.7	246
12615	1.0	1.1	7.9	12.9	24.8	15.1	8.3	.3	.0	.6	72.0	28.0	262
18621	1.3	1.8	3.0	16.2	28.1	11.5	5.8	1.9	.0	.6	70.2	29.8	296
TOT													1090
PCT	1.2	2.1	4.9	14.0	27.5	12.8	4.4	1.7	.1	.6	69.3	30.7	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00603	1.2	1.8	3.9	11.8	43.7	37.5	507
06609	.4	2.9	3.2	7.4	50.7	35.3	633
12615	1.3	2.5	3.2	8.9	45.7	38.4	483
18621	.9	4.2	3.7	8.8	45.0	37.4	666
TOT							2289
PCT	.9	3.1	3.5	9.1	46.2	37.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ ANDS+	NM <5/8 AND 5+	TOTAL OBS
00603	1.6	9.7	32.4	37.1	30.5	279
06609	.9	11.5	27.7	42.9	29.4	240
12615	1.0	10.9	30.9	43.3	25.9	258
18621	1.4	6.6	31.5	40.2	28.3	290
TOT						1067
PCT	1.3	9.1	30.9	40.3	28.9	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
60/64	.0	.0	*	*	.1	*	.0	.0	.2	
55/59	.0	.0	.1	.1	.3	.3	.3	.1	1.2	
50/54	.0	.0	.2	.6	1.9	2.0	3.1	2.0	9.8	
45/49	.0	.0	*	1.2	2.6	8.2	9.0	10.7	31.8	
40/44	.0	.0	.1	.2	3.8	9.3	13.5	12.0	38.9	
35/39	.0	.0	.0	.3	1.5	2.9	4.6	6.1	15.4	
30/34	.0	.0	.0	.0	.3	.4	.5	.8	2.1	
25/29	.0	.0	.0	.0	.0	.4	.0	.2	.6	
TOTAL									2093	100.0
PCT	.0	.0	.4	2.5	10.5	23.6	31.0	31.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
60/64	*	.1	.0	.1	.0	*	.0	.0	.0	*
55/59	.2	.1	.1	*	.1	*	.3	.2	.0	.2
50/54	1.5	.5	.2	.1	.3	1.2	2.6	3.3	.0	.1
45/49	4.1	.7	1.3	1.1	1.3	3.4	7.7	11.6	.0	.6
40/44	5.3	1.7	1.8	1.4	2.1	4.3	10.3	11.4	.0	.5
35/39	1.4	.5	1.6	1.0	1.7	3.0	3.8	2.1	.0	.4
30/34	.1	.3	.2	.2	.3	.7	.4	.1	.0	.0
25/29	.0	.0	.0	.0	.4	.1	*	.0	.0	.0
TOTAL	12.7	3.7	5.2	3.8	6.2	12.7	25.1	28.8	.0	1.8

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00603	63	52	49	43	37	34	27	43.2	3294
06609	60	50	48	43	36	33	25	42.4	6292
12615	62	51	49	43	36	34	25	42.8	3160
18621	61	52	49	43	37	34	20	43.3	10910
TOT	63	51	49	43	37	34	20	43.0	23656

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00603	.0	4.7	10.8	23.0	32.3	29.1	81	498		
06609	.0	1.3	9.0	23.4	30.0	36.4	84	592		
12615	.0	2.2	8.7	24.8	34.4	29.9	83	432		
18621	.0	3.1	12.0	23.4	29.4	32.2	82	650		
TOT	0	61	234	513	683	681	82	2172		

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(OVER-ALL) 1854-1978

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	25 28	29 32	33 36	37 40	41 44	45 48	49 52	53 56	57 60	61 64	TOT	N FOG	NO FOG
11/13	.0	.0	.0	.0	.0	.0	.0	.2	*		5	.0	.2
9/10	.0	.0	.0	.0	.0	.1	.1	.4	.1	.1	14	.0	.8
7/8	.0	.0	.0	.0	.0	.1	.2	.6	*	.1	22	.0	1.1
6	.0	.0	.0	.0	.1	.1	.6	.5	.1	.1	25	.0	1.4
5	.0	.0	.0	.0	.1	.5	.7	.5	.1	.0	37	.1	1.8
4	.0	.0	.0	.1	.2	1.4	1.2	.4	.0	.0	66	.2	3.3
3	.0	.0	.0	.0	.6	1.9	1.3	.7	.0	.0	84	.2	4.2
2	.0	.0	.0	.3	2.1	4.2	2.1	.0	.0	.0	153	.4	8.3
1	.0	.0	.1	.1	3.9	3.9	1.6	.2	.0	.0	183	1.2	8.7
0	.0	.0	.0	.5	6.8	4.2	1.4	.1	.0	.0	243	1.4	11.5
-1	.0	.0	*	2.1	5.7	2.8	1.0	.1	.0	.0	236	1.3	11.4
-2	.0	.0	.3	3.6	5.4	2.8	.7	*	.0	.0	235	1.0	11.8
-3	.0	.0	.3	2.8	2.0	1.6	.4	.0	.0	.0	133	.7	6.4
-4	.0	.0	.2	3.5	1.7	1.2	.2	.0	.0	.0	121	.2	6.4
-5	.0	.0	.9	1.9	1.7	.9	.0	*	.0	.0	102	.1	5.3
-6	.0	*	.8	1.7	.8	.3	.0	.0	.0	.0	65	.3	3.3
-7/-8	.1	.5	1.1	1.3	1.4	.3	.1	.0	.0	.0	86	.4	4.4
-9/-10	*	.2	.3	.3	.3	.0	.0	.0	.0	.0	22	.2	.9
-11/-13	.0	.1	.3	.4	.0	.0	.0	.0	.0	.0	13	.0	.9
-14/-16	.1	*	*	.0	.0	.0	.0	.0	.0	.0	5	.0	.2
TOTAL											1850		
PCT	.3	.9	4.4	18.7	32.8	27.2	11.4	3.7	.5	.2	100.0	7.6	92.4

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
41	.4	1.2	.3	.0	.0	.0	1.9	.0	.3	.0	.0	.0	.0	.5
1-2	.0	1.3	1.5	.0	.0	.0	2.8	.0	1.1	.4	.0	.0	.0	1.5
3-4	.0	.2	.7	1.0	.0	.0	1.9	.0	.2	*	.1	.0	.0	.3
5-6	.0	.2	2.4	.6	.0	.0	3.2	.0	.0	*	.0	.0	.0	*
7	.0	.0	.1	.5	.2	.0	.7	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.3	.4	.0	.0	.7	.0	.0	.0	.1	.0	.0	.1
10-11	.0	.0	.0	1.1	.2	.0	1.3	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	1.3	.0	1.3	.0	.0	.0	.0	.5	.0	.5
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.4	2.9	5.4	3.6	2.0	.0	14.2	.0	1.8	.5	.1	.5	.0	2.9

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
41	.9	.0	.1	.0	.0	.0	1.0	.2	.2	.0	.0	.0	.0	.4
1-2	.0	.9	.1	.0	.0	.0	1.0	.2	.2	*	.0	.0	.0	.4
3-4	.0	.0	1.5	.0	.0	.0	1.5	.0	.1	.0	.0	.0	.0	.1
5-6	.0	.2	.1	.0	.0	.0	.3	.0	.0	*	.0	.0	.0	.1
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*
10-11	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	*	.2	.0	.2
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.9	1.1	1.9	.1	.0	.0	3.9	.4	.5	.1	.1	.2	.0	1.2

PERIOD: (OVER-ALL) 1963-1978

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53.95 73.9W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.9	.1	.0	.0	.0	1.0	.2	.5	.0	.0	.0	.0	.8
1-2	.0	1.5	.1	.0	.0	.0	1.6	.1	1.8	.4	.0	.0	.0	2.3
3-4	.0	.0	.1	.0	.0	.0	.1	.0	.0	1.0	.3	.0	.0	1.3
5-6	.0	.0	.6	.1	.0	.0	.7	.0	.3	2.2	1.4	.0	.0	3.9
7	.0	.0	.1	.2	.0	.0	.3	.0	.0	.4	.3	.0	.0	.7
8-9	.0	.0	.1	.1	.0	.0	.1	.0	.2	.2	.6	.4	.1	1.4
10-11	.0	.0	.0	.4	.0	.0	.4	.0	.0	.0	.2	.2	.0	.4
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1
13-16	.0	.0	.0	.2	.2	.0	.4	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.4	1.1	1.0	.2	.0	4.7	.5	2.9	4.6	2.7	.3	.0	10.9

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.3	.8	.0	.0	.0	.0	1.1	.1	.8	.2	.0	.0	.0	1.1	
1-2	.1	3.1	1.7	.0	.0	.0	4.9	.0	1.9	2.8	.0	.0	.0	4.8	
3-4	.0	.8	1.4	.7	.0	.0	2.9	.0	1.3	2.4	.6	.0	.0	4.3	
5-6	.0	.0	2.8	1.8	.1	.0	4.6	.0	.4	3.6	3.2	.1	.0	7.2	
7	.0	.1	3.0	.8	.2	.0	4.1	.0	.3	1.0	3.1	.7	.0	5.1	
8-9	.0	.0	.1	1.9	.6	.0	2.6	.0	.0	.0	.0	.8	.6	1.4	
10-11	.0	.0	.5	1.2	.4	.0	2.0	.0	.0	.5	1.6	.4	.2	2.7	
12	.0	.0	.0	.9	.9	.0	1.8	.0	.0	.0	.5	.0	.0	.5	
13-16	.0	.0	.7	1.3	1.1	.0	3.1	.0	.0	.0	.9	1.6	.0	2.4	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.2	
20-22	.0	.0	.3	.0	.2	.0	.6	.0	.0	.1	.0	.2	.0	.3	
23-25	.0	.0	.5	.2	.6	.0	1.3	.0	.0	.0	.2	.6	.0	.9	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.4	4.8	11.0	8.9	4.2	.0	29.2	.1	4.7	10.7	10.9	4.3	.2	30.9	98.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	4.5	4.8	.7	.0	.0	.0	10.0	
1-2	.6	11.9	7.0	.0	.0	.0	19.6	
3-4	.0	2.5	7.1	2.6	.0	.0	12.3	
5-6	.0	1.0	11.7	7.0	.2	.0	19.9	
7	.0	.4	4.6	4.9	1.0	.0	10.9	
8-9	.2	.2	1.1	3.6	1.3	.0	6.4	
10-11	.0	.0	1.0	4.5	1.4	.2	7.1	
12	.0	.0	.0	1.5	1.1	.0	2.6	
13-16	.0	.0	.7	2.3	4.8	.0	7.9	
17-19	.0	.0	.0	.0	.2	.0	.2	
20-22	.0	.0	.4	.1	.4	.0	.9	
23-25	.0	.0	.5	.5	1.3	.0	2.2	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	5.3	20.9	34.9	27.1	11.6	.2	100.0	554

PERIOD: (OVER-ALL) 1952-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.5	8.2	6.8	4.9	2.9	1.3	2.0	1.5	.8	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	293	5
6-7	.0	.4	3.1	2.5	2.6	2.4	1.8	1.3	1.4	1.0	.4	.1	.0	.0	.0	.0	.0	.0	.0	160	9
8-9	.0	.3	.7	.6	2.2	4.5	2.6	2.1	3.5	1.1	.3	.9	.1	.0	.0	.0	.0	.0	.0	169	11
10-11	.0	.6	.3	.3	.8	2.7	2.4	.6	3.2	2.3	1.2	1.0	.0	.0	.0	.0	.0	.0	.0	117	12
12-13	.0	.0	.5	.2	.2	.2	.5	.1	.8	.4	.6	.3	.1	.0	.0	.0	.0	.0	.0	34	13
>13	.0	.0	.0	.2	.1	.3	.1	.0	.6	1.1	.6	.0	.0	.0	.0	.0	.0	.0	.0	28	14
INDET	6.7	1.8	.6	.4	.2	.5	.2	.2	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	97	2
TOTAL PCT	9.2	11.4	12.0	9.1	8.8	11.9	9.8	5.9	10.4	6.1	3.1	2.2	.2	.0	.0	.0	.0	.0	.0	100.0	8

PERIOD: (PRIMARY) 1898-1976
(OVER-ALL) 1854-1976

TABLE 20

AREA 0025 MAGELLAN STRAIT WEST
53.9S 73.9W

PERCENT FREQUENCY OF OCCURRENCE OF SEA TEMP (DEG F) BY MONTH

SEA TMP DEG F	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	PCT
96+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
95/96	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
93/94	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
91/92	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
89/90	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
87/88	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
85/86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
83/84	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
81/82	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
79/80	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
77/78	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
75/76	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
73/74	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
71/72	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
69/70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
67/68	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
65/66	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
63/64	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
61/62	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	*
59/60	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	*
57/58	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	8	*
55/56	.4	.2	.3	.1	.0	.0	.0	.0	.0	.0	.1	.1	22	.1
53/54	1.9	1.9	1.2	.4	.0	.1	.1	.0	.0	.0	.3	.3	108	.5
51/52	7.0	10.2	7.9	2.2	.9	.1	.0	.0	.2	.0	.2	.4	530	2.3
49/50	16.3	19.7	20.0	10.4	4.0	2.0	.7	*	.2	.5	.8	6.6	1474	6.5
47/48	19.9	21.0	21.7	20.3	11.8	5.9	3.1	.8	.9	2.6	7.3	13.8	2359	10.3
45/46	33.7	31.4	25.9	25.7	23.2	18.6	17.3	11.4	11.1	17.9	23.1	29.3	5060	22.2
43/44	17.7	14.8	18.3	25.1	27.8	20.3	16.7	16.3	21.2	25.3	24.9	32.1	4961	21.8
41/42	2.7	.7	4.3	13.8	23.7	29.9	29.9	31.5	33.3	35.9	34.6	15.5	4976	21.8
39/40	.1	.1	.2	1.1	6.7	17.7	24.8	31.1	25.7	15.2	7.8	1.3	2601	11.4
37/38	.0	.0	.1	.6	1.7	3.1	5.4	6.5	6.4	1.7	.9	.3	525	2.3
35/36	.1	.0	.1	.4	.2	.8	1.4	1.5	.7	.3	.1	*	109	.5
33/34	.0	.0	.0	.1	.0	.8	.3	.5	.1	.5	.1	.0	44	.2
31/32	.0	.0	.0	.0	.0	.5	.1	.2	.0	.1	*	.0	16	.1
29/30	.0	.0	.0	.0	.0	.1	.2	.1	.0	*	.0	.0	6	*
27/28	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	4	*
<27	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
TOTAL	1956	1852	1712	1613	1594	1447	1875	2286	2034	2064	2230	2143	22806	100.0
MEAN	46.7	47.2	46.8	45.3	43.8	42.5	41.8	41.2	41.6	42.4	43.2	44.7	43.9	

TABLE 21

PRESSURE (MB)

AVERAGE BY HOUR (GMT)

MO	0000	0300	0600	0900	1200	1500	1800	2100	MEAN	TOTAL OBS
JAN	1000	1000	998	998	999	997	998	998	998	1003
FEB	999	1001	998	999	998	1002	999	999	999	949
MAR	1002	1004	1002	1001	1002	1011	997	1001	1000	824
APR	1004	1005	1003	1002	1004	1002	1003	1004	1003	896
MAY	1001		1001	1002	1001		999	999	1000	798
JUN	1002		1001	1002	1002		1002	1003	1002	813
JUL	999	1001	999	1001	1000	999	1000	1000	1000	1055
AUG	1001	999	1001	1001	1002	1002	1003	1000	1002	1191
SEP	1004	998	1002	1002	1004	1002	1004	1005	1004	1147
OCT	1005	1006	1005	1004	1004	1010	1001	1006	1003	1156
NOV	999	1004	998	997	998	1000	997	998	997	1369
DEC	999	1006	999	998	997	1002	997	998	998	1224
ANN	1001	1002	1001	1001	1001	1003	1000	1001	1000	12425
OBS	1619	56	1628	1355	1550	50	4925	1242		

PERCENTILES

MO	MIN	1%	5%	25%	50%	75%	95%	99%	MAX
JAN	965	975	982	991	997	1006	1016	1018	1024
FEB	965	975	981	991	998	1008	1017	1022	1024
MAR	964	972	979	993	999	1008	1020	1024	1029
APR	966	977	983	994	1005	1011	1020	1024	1028
MAY	963	967	978	991	1002	1009	1020	1025	1030
JUN	966	972	978	994	1003	1010	1023	1029	1032
JUL	964	973	978	991	1001	1009	1019	1026	1033
AUG	964	972	980	992	1001	1012	1024	1029	1033
SEP	957	970	982	993	1003	1014	1026	1028	1033
OCT	961	973	982	994	1004	1013	1024	1029	1031
NOV	964	970	979	990	997	1005	1017	1022	1027
DEC	964	977	983	991	997	1004	1013	1019	1023

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1865-1977

JANUARY

AREA 0026 GULF OF PEILAS
47.05 76.2W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA						
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SNOW	NO SIG WEA	
N	20.8	7.4	10.2	.0	.0	.0	.0	37.5	12.0	.0	1.9	.0	.0	.0	48.6	
NE	22.9	11.4	2.9	.0	.0	.0	.0	37.1	11.4	.0	.0	.0	.0	.0	51.4	
E	.0	.0	50.0	.0	.0	.0	.0	50.0	.0	.0	.0	.0	.0	.0	50.0	
SE	22.2	.0	.0	.0	.0	.0	.0	22.2	.0	.0	22.2	.0	.0	.0	55.6	
S	.0	.0	7.5	.0	.0	.0	.0	7.5	17.2	.0	4.3	.0	4.3	.0	66.7	
SW	7.6	.0	6.8	.0	.0	.0	.0	9.4	5.8	.0	4.2	.0	6.3	.0	74.3	
W	10.7	3.0	.8	.0	.0	.0	.0	14.6	17.4	.0	1.1	.0	1.1	.0	65.8	
NW	12.7	5.8	5.1	.0	.0	.0	.0	22.2	12.0	.9	5.6	.0	.0	.0	59.3	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	14.3	.0	.0	.0	.0	14.3	.0	.0	.0	.0	.0	.0	85.7	
TOT PCT	11.3	4.0	5.5	.0	.0	.0	.0	20.2	12.4	.3	3.5	.0	1.4	.0	62.1	
TOT OBS:	346															

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00&03	15.5	3.1	7.2	.0	.0	.0	.0	25.8	10.3	.0	5.2	.0	2.1	.0	56.7
06&09	5.9	5.9	2.4	.0	.0	.0	.0	14.1	11.8	1.2	4.7	.0	1.2	.0	67.1
12&15	8.3	3.6	6.0	.0	.0	.0	.0	17.9	9.5	.0	2.4	.0	1.2	.0	69.0
18&21	15.5	3.6	6.0	.0	.0	.0	.0	22.6	17.9	.0	1.2	.0	1.2	.0	57.1
TOT PCT OBS:	11.4 350	4.0	5.4	.0	.0	.0	.0	20.3	12.3	.3	3.4	.0	1.4	.0	62.3

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	.3	2.4	3.3	2.1	.6	*	8.7	17.4	8.1	15.9	9.4	6.5	8.1	15.9	10.9	6.4		
NE	.3	.5	.5	.1	*	.0	1.4	10.4	.9	.0	1.1	2.0	1.4	9.1	1.6	1.5		
E	.2	.5	.1	*	.0	.0	.8	7.7	.9	9.1	.7	1.1	1.2	.0	.5	.2		
SE	.2	.7	.9	.2	.1	.0	2.1	13.2	2.5	.0	2.3	2.2	2.5	.0	1.3	2.3		
S	1.0	3.9	4.0	1.0	.1	*	10.1	12.4	10.8	.0	10.0	9.4	12.2	.0	8.5	11.5		
SW	.6	8.1	7.7	3.4	.6	.2	20.6	14.9	21.3	9.1	21.9	25.3	22.7	11.4	15.6	22.3		
W	1.2	8.3	10.6	5.5	1.3	*	26.9	15.8	24.3	15.9	28.2	29.2	25.5	22.7	29.2	23.6		
NW	.8	6.8	10.7	8.0	1.7	.3	28.3	18.0	30.2	50.0	25.3	24.0	24.5	40.9	31.0	31.8		
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
CALM	1.1	.0	.0	.0	.0	.0	1.1	.0	1.0	.0	1.1	.3	1.8	.0	1.4	.3		
TOT OBS	136	756	922	495	112	16	2437		388	11	379	306	384	11	647	311		
TOT PCT	5.6	31.0	37.8	20.3	4.6	.7		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+						00	06	12	18
N	1.4	3.0	2.9	1.1	.2			8.7	17.4		8.3	8.1	8.4	9.4
NE	.6	.6	.2	.1	*			1.4	10.4		.9	1.5	1.6	1.6
E	.5	.2	*	*	.0			.8	7.7		1.1	.8	1.2	1.4
SE	.5	1.0	.4	.1	.0			2.1	13.2		2.4	2.3	2.4	1.6
S	2.3	4.8	2.5	.3	.1			10.1	12.4		10.5	9.7	11.8	9.4
SW	3.0	10.3	5.2	1.6	.6			20.6	14.9		21.0	23.4	22.4	17.7
W	3.8	11.4	8.4	2.7	.5			26.9	15.8		24.1	28.6	25.4	27.4
NW	3.0	10.3	10.2	4.2	.7			28.3	18.0		30.8	24.7	25.0	31.3
VAR	.0	.0	.0	.0	.0			.0	.0		.0	.0	.0	.0
CALM	1.1	.0	.0	.0	.0			1.1	.0		1.0	.7	1.8	1.0
TOT OBS	393	1014	731	246	53	2437			15.7		399	685	395	958
TOT PCT	16.1	41.6	30.0	10.1	2.2				100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1865-1977

JANUARY

AREA 0026 GULF OF PEILAS
47.05 76.2W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0003	1.0	4.5	33.6	37.8	19.3	3.3	.5	15.0	100.0	399
0609	.7	4.2	32.7	38.0	19.9	3.9	.0	15.4	100.0	685
1215	1.8	6.1	27.3	41.8	19.2	3.3	.5	15.1	100.0	395
1821	1.0	4.1	30.3	36.1	21.5	6.2	.8	16.4	100.0	958
TOT	26	110	756	922	495	112	10	15.7		2437
PCT	1.1	4.5	31.0	37.8	20.3	4.6	.7	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSO	TOTAL OBS	MEAN CLOUD COVER
N	.8	2.0	2.4	10.8		6.7
NE	.3	.4	.2	2.0		6.2
E	.0	.0	.3	.3		7.5
SE	.0	.0	.1	1.0		7.9
S	.8	.3	2.4	2.6		6.2
SW	.5	1.4	4.4	7.7		6.8
W	.0	1.0	8.4	15.7		7.2
NW	.8	1.9	10.1	18.8		6.9
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	1.3	1.0		6.8
TOT OBS	10	21	88	178	297	6.9
TOT PCT	3.4	7.1	29.6	59.9	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

BY WIND DIRECTION												
	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
	149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
N	.7	.3	1.7	1.9	5.0	2.4	.3	.0	.0	.3	3.7	
NE	.0	.3	.3	.3	.4	.0	.1	.0	.0	.1	.9	
E	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.0	
SE	.0	.0	.0	.3	.3	.1	.0	.0	.0	.0	.3	
S	.0	.3	.7	.3	1.1	.6	.0	.0	.0	.0	3.1	
SW	.3	.4	.7	1.2	3.6	3.4	.3	.3	.0	.3	3.4	
W	.3	.8	3.4	8.4	4.0	1.9	2.3	.3	.0	.3	3.6	
NW	.8	1.2	2.4	7.3	6.5	7.9	1.1	.0	.0	.0	4.5	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	1.0	.0	.3	.3	.0	.0	.0	.0	.7	
TOT OBS	6	11	30	60	64	49	12	2	0	3	60	297
TOT PCT	2.0	3.7	10.1	20.2	21.5	16.5	4.0	.7	.0	1.0	20.2	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
NH >5000	.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0
NH >5000	1.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7
NH >5000	4.7	5.4	5.8	5.8	5.8	5.8	5.8	5.8
NH >2000	13.9	20.7	21.7	21.7	21.7	21.7	21.7	21.7
NH >1000	26.1	39.0	42.4	42.7	43.1	43.4	43.4	43.4
NH >600	37.6	55.9	62.7	63.4	63.7	64.1	64.1	64.1
NH >300	42.0	62.4	71.9	73.2	73.9	74.2	74.2	74.2
NH >150	43.1	64.4	74.2	75.9	76.9	77.3	77.6	77.6
NH >0	43.4	64.7	74.9	76.6	78.3	79.0	79.3	79.3
TOTAL	128	191	221	226	231	233	234	234

TOTAL NUMBER OF OBSI 295

PCT FREQ NH <5/8 20.7

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8 OBSO	TOTAL OBS
	2.2	2.2	3.2	5.4	7.6	7.3	8.3	10.8	51.0	314

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1865-1977

JANUARY

AREA 0026 GULF OF PETLAS
47.05 76.2W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.3	.0	.0	.0	.2	.1	.0	.0	.0	.0	.6	
	NO PCP	.0	.0	.0	.0	.3	.0	.6	.3	.0	.0	1.2	
	TOT %	.3	.0	.0	.0	.5	.1	.6	.3	.0	.0	1.8	
1/2<1	PCP	.6	.0	.3	.0	.0	.0	.0	.0	.0	.0	.9	
	NO PCP	.3	.0	.0	.0	.0	.0	.0	.6	.0	.0	.9	
	TOT %	.9	.0	.3	.0	.0	.0	.0	.6	.0	.0	1.8	
1<2	PCP	.7	.6	.0	.0	.0	.3	.0	.1	.0	.0	1.8	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.7	.6	.0	.0	.0	.3	.0	.1	.0	.0	1.8	
2<5	PCP	1.2	.0	.0	.0	.0	.4	1.6	2.3	.0	.3	5.9	
	NO PCP	.7	.0	.0	.0	.3	.3	.6	1.3	.0	.0	3.2	
	TOT %	2.0	.0	.0	.0	.3	.7	2.2	3.7	.0	.3	9.1	
5<10	PCP	1.7	.4	.0	.3	.0	.0	.8	3.0	.0	.0	6.2	
	NO PCP	2.3	.8	.0	.6	.6	1.9	2.6	8.5	.0	.3	17.6	
	TOT %	4.0	1.2	.0	.9	.6	1.9	3.4	11.5	.0	.3	23.8	
10+	PCP	1.1	.0	.0	.0	.3	.3	1.5	1.0	.0	.0	4.1	
	NO PCP	6.5	.8	.3	.4	5.1	10.4	18.8	13.9	.0	1.5	57.8	
	TOT %	7.6	.8	.3	.4	5.4	10.7	20.2	14.9	.0	1.5	61.9	
TOT OBS													341
TOT PCT		15.5	2.6	.6	1.3	6.8	13.6	26.4	31.1	.0	2.1	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	
	4-10	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.3	.0	.3	.0	.0	.0	.6	
	22+	.3	.0	.0	.0	.2	.1	.0	.0	.0	.0	.6	
	TOT %	.3	.0	.0	.0	.5	.1	.6	.3	.0	.0	1.7	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.3	.0	.0	.0	.0	.0	.0	.3	.0	.0	.6	
	11-21	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	22+	.3	.0	.3	.0	.0	.0	.0	.3	.0	.0	.9	
	TOT %	.9	.0	.3	.0	.0	.0	.0	.6	.0	.0	1.7	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.6	
	11-21	.1	.6	.0	.0	.0	.0	.0	.1	.0	.0	.9	
	22+	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	TOT %	.7	.6	.0	.0	.0	.3	.0	.1	.0	.0	1.7	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.3	
	4-10	.5	.0	.0	.0	.0	.0	.2	.7	.0	.0	1.4	
	11-21	.3	.0	.0	.0	.3	.6	.8	1.4	.0	.0	3.4	
	22+	1.1	.0	.0	.0	.0	.0	1.1	1.4	.0	.0	3.7	
	TOT %	1.9	.0	.0	.0	.3	.6	2.1	3.6	.0	.3	8.8	
5<10	0-3	.0	.0	.3	.3	.0	.0	.0	.0	.0	.3	.9	
	4-10	.8	.1	.0	.3	.0	1.1	.9	2.6	.0	.0	5.7	
	11-21	2.6	1.1	.0	.3	.6	.6	1.6	4.5	.0	.0	11.1	
	22+	1.4	.1	.0	.0	.0	.3	1.3	4.3	.0	.0	7.4	
	TOT %	4.8	1.3	.3	.9	.6	2.0	3.7	11.3	.0	.3	25.1	
10+	0-3	.3	.0	.0	.1	.2	.0	.9	.0	.0	1.4	2.8	
	4-10	2.6	.4	.3	.4	1.9	4.7	5.9	3.1	.0	.0	19.4	
	11-21	3.5	.1	.0	.0	2.8	6.2	9.5	9.5	.0	.0	31.6	
	22+	1.0	.3	.0	.0	.3	.1	3.6	1.9	.0	.0	7.1	
	TOT %	7.4	.8	.3	.4	5.3	11.0	19.9	14.5	.0	1.4	61.0	
TOT OBS													351
TOT PCT		16.0	2.6	.9	1.3	6.6	14.0	26.4	30.3	.0	2.0	100.0	

JANUARY

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1805-1977AREA 0026 GULF OF PEILAS
47.05 76.2W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	400 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	6000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	.0	4.7	10.6	20.0	18.8	15.3	7.1	2.4	.0	1.2	80.0	20.0	85
06009	2.9	4.4	7.4	23.5	14.7	13.2	4.4	.0	.0	2.9	73.5	26.5	68
12015	3.9	2.6	9.2	21.1	27.6	17.1	1.3	.0	.0	.0	82.9	17.1	76
18021	1.3	2.7	12.0	17.3	22.7	18.7	2.7	.0	.0	.0	77.3	22.7	75
TOT PCT	6 2.0	11 3.6	30 9.9	62 20.4	64 21.1	49 16.1	12 3.9	2 .7	0 .0	3 1.0	239 78.6	65 21.4	304 100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	3.1	3.1	3.1	9.3	20.4	60.8	97
06009	.0	1.1	.0	10.3	29.9	58.6	87
12015	2.4	2.4	2.4	5.9	23.5	63.5	85
18021	1.2	.0	1.2	11.6	25.6	60.5	86
TOT PCT	6 1.7	6 1.7	6 1.7	33 9.3	88 24.8	216 60.8	355 100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOURL (GMT)	<150 <50VD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	.0	18.1	39.8	39.8	20.5	83
06009	2.9	14.7	41.2	32.4	26.5	68
12015	4.0	16.0	44.0	40.0	16.0	75
18021	.0	14.5	36.2	43.5	20.3	69
TOT PCT	5 1.7	47 15.9	119 40.3	115 39.0	61 20.7	295 100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
63/69	.0	.0	.4	.0	.8	.4	.0	.0	4	1.5
60/64	.0	.0	.0	.0	.0	1.9	1.9	1.5	14	5.3
55/59	.0	.0	.0	.8	5.3	16.2	10.9	8.7	111	41.9
50/54	.0	.0	.0	.4	4.9	10.9	15.1	11.7	114	43.0
45/49	.0	.0	1.1	.4	3.0	1.1	2.3	2.1	21	7.9
40/44	.0	.0	.0	.0	.0	.0	.4	.4	1	.4
TOTAL	0	0	1	6	30	86	77	65	265	100.0
PCT	.0	.0	.4	2.3	11.3	32.5	29.1	24.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
63/69	.3	.0	.0	.0	.4	.4	.0	.5	.0	.0
60/64	2.0	.3	.0	.0	.0	.8	1.3	.8	.0	.0
55/59	5.1	.8	.4	.5	4.4	6.2	12.2	11.5	.0	.8
50/54	6.3	1.1	.4	.0	1.0	5.3	12.1	15.7	.0	1.1
45/49	.7	.5	.0	.0	.7	.5	3.8	1.5	.0	.4
40/44	.0	.0	.0	.0	.3	.1	.0	.0	.0	.0
TOTAL	14.3	2.7	.8	.5	6.8	13.3	29.3	30.0	.0	2.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	66	61	59	53	47	46	42	53.1	398
06009	62	60	58	52	46	44	41	51.8	685
12015	65	62	59	53	47	46	43	59.0	387
18021	69	64	60	54	48	46	42	59.9	876
TOT	69	62	59	53	47	45	41	53.0	2346

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.4	11.6	30.4	27.5	29.0	82	69		
06009	.0	.0	9.1	25.8	36.4	28.8	83	66		
12015	.0	4.3	10.1	30.4	29.0	26.1	81	69		
18021	.0	4.9	14.8	44.3	23.0	13.1	78	61		
TOT	0	7	30	86	77	65	81	265		

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1865-1977

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TABLE 17

AREA 0026 GULF OF PEILAS
47.05 76.2W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	69 72	TOT	W FOG	WD FOG
11/13	.0	.0	.3	.3	.0	.0	.0	2	.0	.6
9/10	.0	.0	.6	.0	.0	.0	.0	2	.0	.6
7/8	.0	.0	.0	.0	.6	1.0	.3	6	.0	1.9
6	.0	.0	.0	.6	.3	.0	.0	3	.0	1.0
5	.0	.0	.6	1.0	.6	.0	.0	7	.0	2.2
4	.0	.3	1.6	3.8	.0	.0	.0	18	.0	5.8
3	.3	.6	1.6	1.6	.6	.0	.0	15	.0	4.8
2	.0	1.0	4.2	4.8	.6	.0	.0	33	.6	9.9
1	.0	3.2	5.4	3.5	.3	.0	.0	39	.3	12.2
0	.3	3.2	13.1	3.8	.3	.0	.0	65	1.6	19.2
-1	.3	1.9	5.4	1.9	.0	.0	.0	30	.3	9.3
-2	.6	2.9	6.4	.0	.0	.0	.0	31	.3	9.6
-3	.3	1.6	3.5	.3	.0	.0	.0	18	.3	5.4
-4	.0	3.5	1.3	.3	.0	.0	.0	17	.3	5.1
-5	1.0	1.9	1.3	.3	.0	.0	.0	14	.0	4.5
-6	1.0	.0	1.3	.3	.0	.0	.0	8	.0	2.6
-7/-8	.0	.6	.3	.0	.0	.0	.0	3	.0	1.0
-11/-13	.0	.3	.0	.0	.0	.0	.0	1	.0	.3
TOTAL	13		147		11		1	312	12	300
PCT	4.2	21.2	47.1	22.8	3.5	1.0	.3	100.0	3.8	96.2

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	3.4	.0	.0	.0	.0	3.4	.0	.3	.0	.0	.0	.0	.3
1-2	.0	.0	2.5	.0	.0	.0	2.5	.0	.0	2.0	.0	.0	.0	2.0
3-4	.0	.7	4.2	.5	.0	.0	5.4	.0	.0	.8	.2	.0	.0	1.0
5-6	.0	.0	2.6	.5	.0	.0	3.1	.0	.0	.2	.0	.0	.0	.2
7	.0	.0	.0	2.3	.0	.0	2.3	.0	.0	.0	.2	.0	.0	.2
8-9	.0	.0	.0	.7	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.5	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.7	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	4.1	9.3	5.1	.0	.0	18.3	.0	.3	2.9	.3	.0	.0	3.6

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.7
1-2	.0	.7	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.7	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.7	.0	.7	.0	.0	1.3	.7	.0	.0	.0	.0	.0	.7

PERIOD: (OVER-ALL) 1963-1977

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AREA 0026 GULF OF PEILAS
47.05 76.2W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	1.8	.7	.0	.0	.0	2.5	.0	2.1	.7	.0	.0	.0	2.8
3-4	.0	.0	.0	.0	.0	.0	.0	.0	2.6	3.8	.0	.0	.0	6.4
5-6	.0	.0	.0	.0	.0	.0	.0	.0	1.3	2.0	.7	.0	.0	3.9
7	.0	.0	2.0	.0	.5	.0	2.5	.0	.0	.7	.0	.2	.0	.8
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.7	.7	.2	.0	.0	1.5
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.8	2.6	.0	.5	.0	4.9	.0	7.4	7.7	.8	.2	.0	16.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	1.3	.0	.0	.0	.0	1.3	.0	2.1	.0	.0	.0	.0	2.1	
1-2	.0	.7	.0	.0	.0	.0	.7	.0	2.6	8.0	.0	.0	.0	10.6	
3-4	.0	1.3	3.8	.0	.0	.0	5.1	.0	1.3	4.4	3.9	.0	.0	9.6	
5-6	.0	.0	3.6	1.3	.0	.0	4.9	.0	.0	2.1	3.4	.0	.0	5.6	
7	.0	.0	1.1	.7	.0	.0	1.8	.0	.0	2.1	.8	.0	.0	2.9	
8-9	.0	.0	1.3	2.9	.0	.0	4.2	.0	.0	.7	1.5	.0	.0	2.1	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.2	.0	.0	.8	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.7	
13-16	.0	.0	.0	.5	.0	.0	.5	.0	.0	.0	.2	.0	.0	.2	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	3.3	9.8	5.4	.0	.0	18.5	.0	6.0	18.6	10.0	.0	.0	34.6	98.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	2.6	7.8	.0	.0	.0	.0	10.5	
1-2	.0	7.8	13.7	.0	.0	.0	21.6	
3-4	.0	5.4	17.0	5.2	.0	.0	28.1	
5-6	.0	1.3	10.5	5.9	.0	.0	17.6	
7	.0	.0	5.9	3.9	.7	.0	10.5	
8-9	.0	.7	2.6	5.2	.0	.0	8.5	
10-11	.0	.0	.7	.7	.0	.0	1.3	
12	.0	.0	.7	.0	.0	.0	.7	
13-16	.0	.0	.0	.7	.0	.0	.7	
17-19	.0	.0	.0	.7	.0	.0	.7	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	2.6	23.5	51.0	22.2	.7	.0	100.0	153

PERIOD: (OVER-ALL) 1954-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.4	3.7	9.8	4.7	.0	1.9	.5	.9	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	51	4
6-7	.0	.5	3.7	6.5	1.4	5.1	4.7	1.4	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	52	7
8-9	.0	1.4	.9	1.4	6.0	4.7	1.4	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	56	7
10-11	.0	.5	.0	.5	.5	1.4	.5	1.4	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	9
12-13	.0	.0	.0	.5	.5	.0	.5	.0	1.4	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	7	11
>13	.0	.5	.0	.5	.0	.9	.5	.5	.5	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	8	10
INDET	4.2	6.5	3.7	1.4	1.4	3.3	2.3	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	50	4
TOTAL	12	28	39	33	21	37	22	11	9	2	1	0	0	0	0	0	0	0	0	215	6
PCT	5.6	13.0	18.1	15.2	9.8	17.2	10.2	5.1	4.2	.9	.5	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

AD-A064 027

NAVAL WEATHER SERVICE DETACHMENT ASHEVILLE N C
SUMMARY OF SYNOPTIC METEOROLOGICAL OBSERVATIONS (SSMO), SOUTH A--ETC(U)
FEB 79

F/G 4/2

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PERIOD: (PRIMARY) 1906-1978
(OVER-ALL) 1865-1978

FEBRUARY

AREA 0026 GULF OF PEILAS
47.15 76.1W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							NO SIG WEA
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGD PCPN	FGD WD PCPN PAST HR	SMOKE HAZE	BLWG DUST BLWG SNOW	
N	10.1	0.9	9.0	.0	.0	.0	.0	25.9	9.5	.0	4.2	.0	.0	.0	60.3
NE	23.5	23.5	3.9	.0	.0	.0	.0	52.9	.0	.0	.0	.0	.0	.0	47.1
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
S	2.4	.0	.0	.0	.0	.0	3.2	5.6	2.4	.0	.0	.0	.0	.0	92.1
SW	6.8	.0	2.1	.0	.0	.0	1.1	10.0	6.8	.0	.0	.0	.0	.0	83.2
W	4.2	13.0	5.2	.0	.0	.0	1.0	23.4	3.6	.0	4.2	.0	.0	.0	68.8
NW	6.5	8.1	6.2	.0	.0	.0	1.2	20.8	9.6	.0	5.0	2.5	.0	.0	62.1
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	6.4	6.4	4.9	.0	.0	.0	1.1	18.6	6.8	.0	3.0	.8	.0	.0	70.8
TOT OBS:	264														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							NO SIG WEA
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGD PCPN	FGD WD PCPN PAST HR	SMOKE HAZE	BLWG DUST BLWG SNOW	
00003	4.8	4.8	3.2	.0	.0	.0	.0	12.7	6.3	.0	4.8	.0	.0	.0	76.2
06009	6.7	6.7	5.0	.0	.0	.0	.0	18.3	5.0	.0	.0	3.3	.0	.0	73.3
12019	10.0	5.7	10.0	.0	.0	.0	2.9	28.6	7.1	.0	5.7	.0	.0	.0	58.6
18021	4.1	8.1	2.7	.0	.0	.0	1.4	14.9	8.1	.0	1.4	.0	.0	.0	75.7
TOT PCT	6.4	6.4	5.2	.0	.0	.0	1.1	18.7	6.7	.0	3.0	.7	.0	.0	70.8
TOT OBS:	267														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	.6	2.0	2.9	1.9	.8	.3		8.4	18.8		7.7	27.5	8.7	5.1	7.2	25.0	11.0	8.1
NE	.1	.6	.3	.2	.1	.1		1.4	17.4		1.8	.0	.9	2.0	1.7	.0	1.3	.9
E	.2	.3	.1	.1	.0	.0		.7	8.9		.6	.0	1.0	.9	.8	.0	.7	.2
SE	.3	1.1	1.0	.2	.0	.0		2.7	10.6		2.8	.0	3.2	2.6	3.3	.0	2.2	2.3
S	.5	5.4	6.1	2.1	.2	.1		14.3	13.9		14.1	27.5	12.9	16.1	16.0	9.1	12.5	15.3
SW	.6	6.2	7.3	5.1	1.9	.3		21.3	18.1		23.0	12.5	23.9	21.5	22.6	20.5	16.5	23.6
W	.8	5.8	8.8	6.4	1.8	.4		24.0	18.6		22.8	.0	24.4	27.1	22.0	13.6	25.4	23.4
NW	.4	7.1	9.1	6.9	1.8	.4		25.7	18.4		26.0	32.5	23.6	23.8	24.2	31.8	29.1	25.2
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.4							1.4	.0		1.1	.0	1.4	1.0	2.3	.0	1.4	.9
TOT OBS	112	653	825	533	155	34	2312		17.2		368	10	355	313	383	11	556	316
TOT PCT	4.8	28.2	35.7	23.1	6.7	1.5		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00 03	06 09	12 15	18 21	
N	1.3	2.7	2.3	1.7	.4		8.4	18.8	8.3	7.0	7.7	9.9	
NE	.4	.4	.4	.2	.1		1.1	17.4	1.8	1.4	1.6	1.1	
E	.4	.2	.1		.0		.7	8.9	.6	.9	.8	.5	
SE	1.0	1.2	.5		.0		2.7	10.6	2.7	3.0	3.2	2.2	
S	2.5	6.6	4.3	.8	.1		14.3	13.9	14.5	14.4	15.8	13.5	
SW	2.3	8.2	6.4	3.6	.7		21.3	18.1	22.8	22.8	22.5	19.1	
W	2.9	7.9	8.0	4.5	.9		24.0	18.6	22.2	25.7	21.8	24.7	
NW	2.6	9.5	8.2	4.5	.8		25.7	18.4	26.2	23.7	24.4	27.7	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	1.4						1.4	.0	1.1	1.2	2.3	1.3	
TOT OBS	341	847	699	354	71	2312		17.2	378	668	394	872	
TOT PCT	14.7	36.6	30.2	15.3	3.1		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1906-1978
(OVER-ALL) 1865-1978

FEBRUARY

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47.1S 76.1W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	1.1	4.2	26.7	33.6	25.9	7.4	1.1	17.7	100.0	378
0600Z	1.2	2.5	28.6	36.1	24.0	6.3	1.3	17.3	100.0	668
1200Z	2.3	3.3	30.2	35.3	22.3	5.8	.8	16.6	100.0	394
1800Z	1.3	2.9	27.8	36.5	21.4	7.1	2.1	17.3	100.0	872
TOT	32	80	653	825	533	195	34	17.2		2312
PCT	1.4	3.5	28.2	35.7	23.1	6.7	1.5	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	1.1	1.5	3.9	12.0		6.8
NE	.0	.0	.4	1.0		7.6
E	.0	.0	.0	.0		.0
SE	.0	.0	.0	.0		.0
S	4.9	1.9	4.4	.9		3.6
SW	2.2	1.9	8.8	6.2		5.8
W	.3	.3	6.0	9.3		7.1
NW	.6	2.5	10.7	17.0		6.9
VAR	.0	.0	.0	.0		.0
CALM	.4	.4	.0	1.3		5.8
TOT OBS	22	20	79	110	231	6.3
TOT PCT	9.5	8.7	34.2	47.6	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.6	.4	3.7	1.8	1.9	6.1	.0	.0	.0	.0	3.9	
NE	.1	.0	.4	.0	.4	.4	.0	.0	.0	.0	.0	
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
S	.0	.0	.0	.8	1.2	1.5	.3	.0	.0	.0	8.3	
SW	.0	.0	.0	5.8	1.1	6.4	.5	.0	.0	.0	5.2	
W	.3	.4	.6	5.1	1.3	2.9	.0	.4	.0	.0	4.8	
NW	1.1	1.3	4.3	4.2	6.2	4.3	.9	.0	.0	.9	7.7	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.9	.4	.0	.0	.0	.0	.0	.9	
TOT OBS	5	5	21	43	29	50	4	1	0	2	71	231
TOT PCT	2.2	2.2	9.1	18.6	12.6	21.6	1.7	.4	.0	.9	30.7	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)			VSBY (NM)			VSBY (NM)		
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0	>0
>6500	.4	.4	.4	.4	.9	.9	.9	.9	.9
>5000	.9	.9	.9	.9	1.3	1.3	1.3	1.3	1.3
>3500	2.2	2.6	2.6	2.6	3.0	3.0	3.0	3.0	3.0
>2000	15.1	23.7	24.1	24.1	24.6	24.6	24.6	24.6	24.6
>1000	19.0	33.6	35.3	35.8	36.6	36.6	36.6	36.6	36.6
>600	31.9	51.7	53.9	54.7	55.6	55.6	55.6	55.6	55.6
>300	34.1	54.7	59.5	62.5	63.8	64.2	64.2	64.2	64.2
>150	34.5	56.9	61.6	65.1	66.4	66.8	66.8	66.8	66.8
>0	34.5	57.3	62.9	66.4	67.7	68.5	68.5	69.0	69.0
TOTAL	80	133	146	154	157	159	159	160	160

TOTAL NUMBER OF OBS: 232

PCT FREQ NH <5/8: 31.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
	6.2	2.5	8.7	8.3	5.8	6.6	14.5	11.6	33.6	241

PERIOD: (PRIMARY) 1906-1978
(OVER-ALL) 1865-1978

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47.15 76.1W

TABLE 8

		PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF PRECIPITATION WITH VARYING VALUES OF VISIBILITY											TOTAL OBS
VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	
<1/2	PCP	.3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4	1.5
	NO PCP	.0	.0	.0	.0	.0	.0	.6	.9	.0	.0	1.5	
	TOT %	.3	.0	.0	.0	.0	.0	.6	1.0	.0	.0	1.9	
1/2<1	PCP	.6	.0	.0	.0	.0	.0	.0	.2	.0	.0	.8	1.9
	NO PCP	.4	.0	.0	.0	.0	.0	.2	.6	.0	.0	1.1	
	TOT %	.9	.0	.0	.0	.0	.0	.2	.8	.0	.0	1.9	
1<2	PCP	.7	.0	.0	.0	.0	.0	.3	.2	.0	.0	1.1	2.7
	NO PCP	.4	.0	.0	.0	.3	.1	.3	1.6	.0	.0	2.7	
	TOT %	1.0	.0	.0	.0	.3	.1	.6	1.8	.0	.0	3.8	
2<5	PCP	1.1	.5	.0	.0	.0	.0	.0	1.8	.0	.0	3.4	6.1
	NO PCP	.8	.0	.0	.0	.0	.0	.0	1.9	.0	.0	2.7	
	TOT %	1.9	.5	.0	.0	.0	.0	.0	3.7	.0	.0	6.1	
5<10	PCP	2.0	.4	.0	.0	.3	.7	2.8	2.6	.0	.0	8.7	19.3
	NO PCP	4.9	.4	.0	.0	.0	2.7	4.7	6.5	.0	.0	19.3	
	TOT %	6.9	.8	.0	.0	.3	3.4	7.6	9.1	.0	.0	28.0	
10+	PCP	.0	.0	.0	.0	.4	1.1	1.1	1.5	.0	.0	4.2	54.2
	NO PCP	6.8	.4	.0	.0	11.0	13.4	8.1	12.6	.0	1.9	54.2	
	TOT %	6.8	.4	.0	.0	11.4	14.5	9.3	14.1	.0	1.9	58.3	
TOT OBS													264
TOT PCT		17.9	1.6	.0	.0	11.9	18.0	18.2	30.5	.0	1.9	100.0	

TABLE 9

		PERCENT FREQ OF WIND DIRECTION VS WIND SPEED WITH VARYING VALUES OF VISIBILITY											TOTAL OBS
VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5
	4-10	.0	.0	.0	.0	.0	.0	.6	.9	.0	.0	1.5	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4	
	TOT %	.3	.0	.0	.0	.0	.0	.6	1.0	.0	.0	1.9	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	
	22+	.6	.0	.0	.0	.0	.0	.2	.7	.0	.0	1.5	
	TOT %	.9	.0	.0	.0	.0	.0	.2	.7	.0	.0	1.9	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9
	4-10	.4	.0	.0	.0	.0	.0	.6	.9	.0	.0	1.9	
	11-21	.3	.0	.0	.0	.0	.0	.0	.5	.0	.0	.7	
	22+	.6	.2	.0	.0	.3	.1	.0	.7	.0	.0	1.9	
	TOT %	1.2	.2	.0	.0	.3	.1	.6	2.1	.0	.0	4.3	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.9
	4-10	.3	.1	.0	.0	.0	.0	.0	1.1	.0	.0	1.5	
	11-21	.6	.0	.0	.0	.0	.0	.0	1.3	.0	.0	1.9	
	22+	1.0	.4	.0	.0	.0	.0	.0	1.2	.0	.0	2.6	
	TOT %	1.9	.5	.0	.0	.0	.0	.0	3.6	.0	.0	5.9	
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	27.5
	4-10	.4	.0	.0	.0	.3	1.3	1.7	1.6	.0	.0	5.2	
	11-21	3.5	.6	.0	.0	.0	1.3	3.7	3.2	.0	.0	12.3	
	22+	2.9	.2	.0	.0	.0	.7	2.0	4.2	.0	.0	10.0	
	TOT %	6.8	.7	.0	.0	.3	3.3	7.4	8.9	.0	.0	27.5	
10+	0-3	1.1	.0	.0	.0	.0	.6	2.0	.0	.0	1.9	5.6	58.4
	4-10	2.0	.0	.0	.0	3.3	4.5	2.0	4.9	.0	.0	16.7	
	11-21	2.6	.4	.0	.0	5.7	6.0	3.8	4.9	.0	.0	23.4	
	22+	1.7	.0	.0	.0	2.1	3.2	1.7	4.0	.0	.0	12.6	
	TOT %	7.4	.4	.0	.0	11.2	14.2	9.5	13.8	.0	1.9	58.4	
TOT OBS													269
TOT PCT		16.5	1.8	.0	.0	11.7	17.7	18.2	30.3	.0	1.9	100.0	

FEBRUARY

PERIOD: (PRIMARY) 1906-1978
(OVER-ALL) 1865-1978

AREA 0026 GULF OF PEILAS
47.15 76.1W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET) NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY	TOTAL OBS
00003	3.5	.0	8.8	22.8	5.3	14.0	3.5	.0	.0	1.8	59.6	40.4	57
06009	2.0	2.0	6.1	16.3	8.2	24.5	2.0	2.0	.0	2.0	65.3	34.7	49
12015	3.2	4.8	12.7	12.7	17.5	27.0	.0	.0	.0	.0	77.8	22.2	63
18021	.0	2.9	7.2	21.7	15.9	18.8	1.4	.0	.0	.0	68.1	31.9	69
TOT	5	6	21	44	29	50	4	1	0	2	162	76	238
PCT	2.1	2.5	8.8	18.5	12.2	21.0	1.7	.4	.0	.8	68.1	31.9	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	3.1	1.6	4.7	4.7	25.0	60.9	64
06009	.0	3.3	3.3	8.2	37.7	47.5	61
12015	4.2	2.8	8.5	4.2	23.9	56.3	71
18021	.0	.0	1.3	6.6	25.0	67.1	76
TOT	5	5	12	16	75	159	272
PCT	1.8	1.8	4.4	5.9	27.6	58.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET) NH >4/8) BY HOUR

HR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	3.6	12.5	35.7	25.0	39.3	56
06009	2.1	10.6	31.9	34.0	34.0	47
12015	3.2	23.8	39.7	41.3	19.0	63
18021	.0	10.6	36.4	33.3	30.3	66
TOT	5	34	84	78	70	232
PCT	2.2	14.7	36.2	33.6	30.2	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.0	.0	.9	1.4	.0	.0	5	2.3
60/64	.0	.0	.5	.5	.9	2.3	2.3	2.3	19	8.6
55/59	.0	.0	.0	.5	6.4	10.0	14.1	13.2	97	44.1
50/54	.0	.0	.0	2.3	7.7	9.1	16.8	3.6	87	39.5
45/49	.0	.0	.0	.0	.5	3.2	1.4	.0	12	5.5
TOTAL	0	0	1	7	36	51	80	45	220	100.0
PCT	.0	.0	.5	3.2	16.4	23.2	36.4	20.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65	.5	.0	.0	.0	.8	1.0	.0	.0	.0	.0
60	2.2	.0	.0	.0	.0	1.4	1.5	2.7	.0	.9
55	6.8	1.4	.0	.0	7.2	5.1	4.3	16.5	.0	.9
50	6.6	.5	.0	.0	4.0	8.4	12.3	7.8	.0	.0
45	.2	.0	.0	.0	.0	2.3	1.7	1.3	.0	.0
TOTAL	18.2	1.8	.0	.0	11.9	18.2	19.8	28.3	.0	1.8

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	73	64	59	53	47	45	44	53.3	379
06009	62	60	58	53	46	44	41	52.5	661
12015	63	61	59	54	47	46	40	53.4	383
18021	68	64	60	54	48	46	43	54.3	781
TOT	73	62	59	53	47	45	40	53.4	2204

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.9	18.9	26.4	45.3	7.5	79	53		
06009	.0	1.9	13.5	23.1	28.8	32.7	82	52		
12015	.0	5.6	18.5	18.5	33.3	24.1	81	54		
18021	.0	4.8	16.1	24.2	37.1	17.7	79	62		
TOT	0	8	37	51	80	45	80	221		

FEBRUARY

PERIOD: (PRIMARY) 1906-1978
(OVER-ALL) 1865-1978

TABLE 17

AREA 0026 GULF OF PEILAS
47.13 76.1WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	69 72	73 76	TOT	W FOG	NO FOG
17/19	.0	.0	.0	.0	.0	.0	.0	.4	1	.0	.4
14/16	.0	.0	.0	.0	.0	.4	.0	.0	1	.0	.4
11/13	.0	.0	.0	.0	.0	.4	.0	.0	1	.0	.4
9/10	.0	.0	.4	.0	.0	.8	.0	.0	3	.0	1.2
7/8	.0	.0	.4	1.6	.4	.0	.0	.0	6	.0	2.5
6	.0	.0	.8	.4	.4	.0	.0	.0	4	.0	1.6
5	.0	.0	.4	2.5	.4	.4	.0	.0	9	.4	3.3
4	.0	.4	1.2	4.1	1.6	.0	.0	.0	18	.8	6.6
3	.0	.4	1.6	4.5	1.2	.0	.0	.0	19	.0	7.8
2	.0	.8	2.9	2.9	1.2	.0	.0	.0	19	.8	7.0
1	.0	1.6	2.9	1.6	.8	.0	.0	.0	17	.4	6.6
0	.0	3.3	4.1	4.5	.0	.0	.0	.0	29	.8	11.1
-1	.0	2.9	6.6	2.9	.0	.0	.0	.0	30	.0	12.3
-2	.4	4.5	5.7	1.2	.0	.0	.0	.0	29	.0	11.9
-3	.8	4.5	5.3	.4	.0	.0	.0	.0	27	.0	11.1
-4	.4	2.5	2.5	.0	.0	.0	.0	.0	13	.0	5.3
-5	.8	2.0	1.2	.0	.0	.0	.0	.0	10	.0	4.1
-6	.4	.0	1.2	.0	.0	.0	.0	.0	4	.0	1.6
-7/-8	.0	.8	.0	.4	.0	.0	.0	.0	3	.0	1.2
-9/-10	.4	.0	.0	.0	.0	.0	.0	.0	1	.0	.4
TOTAL	8	58	91	66	15	5	1	1	244	8	236
PCT	3.3	23.8	37.3	27.0	6.1	2.0	.0	.4	100.0	3.3	96.7

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

WGT	N							PCT	NE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.8	.6	.0	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	2.1	4.2	.0	.0	.0	6.3	.0	.2	.0	.0	.0	.0	.0	.0	.2
3-4	.0	.0	1.5	.8	.0	.0	2.3	.0	.0	.8	.0	.0	.0	.0	.0	.8
5-6	.0	.0	2.1	.6	.0	.0	2.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.8	.0	.0	.8	.0	.0	.0	.8	.0	.0	.0	.0	.8
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.6	.0	.6	.0	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.6	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.8	2.7	8.4	2.3	1.3	.0	15.5	.0	.2	.8	.8	.0	.0	.0	.0	1.9

WGT	E							PCT	SE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

PERIOD: (DVER-ALL) 1963-1978

FEBRUARY

AREA 0026 GULF OF PEILAS
47.15 76.1W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.6	.0	.0	.0	.0	.6	.0	.2	.0	.0	.0	.0	.2	
1-2	.0	.6	1.3	.0	.0	.0	1.9	.0	3.8	2.3	.0	.0	.0	6.1	
3-4	.0	.5	2.3	.0	.0	.0	2.9	.0	.2	3.8	.8	.0	.0	4.8	
5-6	.0	.0	1.3	1.5	.0	.0	2.7	.0	.8	4.6	4.4	.8	.0	10.7	
7	.0	.0	2.4	.0	.0	.0	2.5	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	2.4	.0	.0	.0	2.5	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.8	1.7	.0	.0	.0	2.5	
12	.0	.0	.0	.8	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.8	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.8	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	1.9	9.9	3.2	.0	.0	14.9	.0	5.9	12.4	6.1	.8	.0	25.2	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2	
1-2	.0	2.3	6.3	.0	.0	.0	8.6	.0	1.1	3.6	.0	.0	.0	4.6	
3-4	.0	1.7	4.4	.6	.0	.0	6.7	.0	.8	3.2	1.9	.0	.0	5.9	
5-6	.0	.0	.8	.0	.0	.0	.8	.0	.0	2.1	2.7	.0	.0	4.8	
7	.0	.0	.0	.8	.0	.0	.8	.0	.0	.8	.8	.0	.0	1.7	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.7	.0	1.7	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.8	.0	.0	1.7	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.8	.0	.0	1.7	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.8	1.9	.0	2.9	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.2	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	4.0	11.6	1.5	.0	.0	17.0	.0	2.1	11.6	8.0	3.8	.0	25.4	100.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	.8	1.7	.0	.0	.0	.0	2.5	
1-2	.0	10.1	17.6	.0	.0	.0	27.7	
3-4	.0	3.4	16.0	4.2	.0	.0	23.5	
5-6	.0	.8	10.9	9.2	.8	.0	21.8	
7	.0	.0	3.4	3.4	.0	.0	6.7	
8-9	.0	.0	2.5	.0	1.7	.0	4.2	
10-11	.0	.8	2.5	.8	.0	.0	4.2	
12	.0	.0	.8	1.7	.0	.0	2.5	
13-16	.0	.0	.8	1.7	2.5	.0	5.0	
17-19	.0	.0	.0	.8	.8	.0	1.7	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.8	16.8	54.6	21.8	5.9	.0	100.0	119

PERIOD: (DVER-ALL) 1953-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.6	8.3	6.1	2.2	1.1	2.2	3.9	.0	1.1	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	48	5
6-7	.0	1.7	1.7	2.2	3.3	1.7	3.3	5.0	1.7	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	38	8
8-9	.0	1.1	1.1	2.8	4.4	4.4	2.2	1.7	1.7	1.7	.6	.0	.6	.0	.0	.0	.0	.0	.0	40	9
10-11	.0	.6	.6	.0	2.2	2.8	1.1	1.1	1.1	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	18	9
12-13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.6	.0	.0	.0	.0	.0	.0	2	28
>13	.0	.0	.0	.0	.0	.6	1.1	.6	.0	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0	6	14
INDET	1.1	.6	.0	.0	3.3	1.1	2.2	1.1	6.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	29	10
TOTAL	3	22	17	13	26	23	25	17	22	7	1	3	2	0	0	0	0	0	0	181	8
PCT	1.7	12.2	9.4	7.2	14.4	12.7	13.8	9.4	12.2	3.9	.6	1.7	1.1	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1978
(OVEN-ALL) 1865-1978

MARCH

AREA 0026 GULF OF PEILAS
47.05 76.0W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG SNOW	NO DUST SIG WEA
N	10.0	4.0	10.0	.0	.0	.0	.0	24.1	12.0	.0	6.0	.0	.0	1.2	56.6
NE	6.8	.0	2.3	.0	.0	.0	.0	9.1	18.2	.0	.0	.0	.0	.0	72.7
E	12.1	9.1	12.1	.0	.0	.0	.0	33.3	12.1	.0	.0	.0	.0	.0	54.5
SE	9.1	2.3	.0	.0	.0	.0	.0	11.4	.0	.0	9.1	.0	.0	.0	79.5
S	2.5	2.5	2.5	.0	.0	.0	.0	7.5	4.3	.0	1.9	.0	.0	.0	86.3
SW	10.4	.0	7.3	.0	.0	.0	.0	17.6	5.2	.0	2.6	.0	2.1	.0	72.5
W	13.7	2.2	9.3	.0	.0	.0	.0	25.2	5.6	.0	5.9	.0	.0	.0	69.3
NW	21.3	2.4	10.5	.0	.0	.0	.0	34.1	9.0	.0	3.9	.0	.0	.3	52.7
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	5.6	8.3	2.8	.0	.0	.0	.0	16.7	.0	.0	.0	.0	.0	.0	83.3
TOT	12.0	3.0	7.6	.0	.0	.0	.0	22.6	7.1	.0	3.8	.0	.3	.3	66.0
PCT OBS:	368														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA								
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG BLWG	DUST SNOW	NO SIG WEA
00603	8.8	5.1	4.4	.0	.0	.0	.0	18.2	10.2	.0	1.5	.0	.0	.7		69.3
06009	12.5	2.5	10.0	.0	.0	.0	.0	25.0	1.3	.0	3.8	.0	1.3	.0		68.8
12015	13.3	2.2	11.1	.0	.0	.0	.0	26.7	8.9	.0	6.7	.0	.0	.0		57.8
18021	19.5	.0	9.8	.0	.0	.0	.0	29.3	6.1	.0	3.7	.0	.0	.0		61.0
TOT PCT TOT OBS:	12.9 389	2.8	8.2	.0	.0	.0	.0	23.9	7.2	.0	3.6	.0	.3	.3		64.8

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.9	2.8	4.6	2.2	1.2	.4		12.1	18.3		12.6	50.0	11.1	12.3	13.4	19.4	12.0	10.2
NE	.2	.7	.4	.1	.1	.0		1.5	12.2		1.4	.0	1.5	1.2	1.5	.0	1.7	1.3
E	.1	.3	.2	.1	.0	.0		.6	13.0		.5	.0	.4	.3	1.2	.0	.8	.4
SE	.3	1.0	.8	.0	.0	.0		2.1	9.7		1.8	.0	2.8	1.8	2.7	.0	1.7	2.0
S	.8	5.6	5.9	1.8	.2	.1		14.3	13.3		12.4	.0	16.1	15.7	15.9	8.3	11.9	15.9
SW	.8	5.9	6.8	3.4	.9	.1		18.1	13.5		18.7	.0	18.8	18.2	16.6	13.9	16.4	21.1
W	.9	5.7	7.0	5.4	1.9	.5		21.4	18.5		21.6	50.0	20.6	23.0	18.5	27.8	23.1	20.5
NW	.6	7.1	10.1	6.8	2.6	.5		27.6	18.8		24.4	.0	27.2	26.0	28.0	19.4	31.1	27.6
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	2.3	.0	.0	.0	.0	.0		2.3	.0		6.4	.0	1.5	1.5	2.0	11.1	1.3	.9
TOT OBS	178	752	929	515	182	41	2597		16.5		466	4	406	342	410	9	618	342
TOT PCT	6.9	29.0	35.8	19.8	7.0	1.6		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+						00	03	06	12	18
N	1.8	4.2	3.8	1.7	.6			12.1	18.3		12.9	11.6	13.5	11.4	
NE	.4	.8	.2	.1	.0			1.5	12.2		1.4	1.4	1.5	1.6	
E	.1	.3	.2	.0	.0			.6	13.0		.5	.4	1.1	.7	
SE	.8	.9	.4	.0	.0			2.1	9.7		1.8	2.3	2.7	1.8	
S	3.0	6.6	3.8	.8	.1			14.3	13.3		12.3	15.9	15.8	13.3	
SW	3.2	7.6	4.8	2.0	.4			18.1	13.5		18.6	18.5	16.7	18.0	
W	3.2	7.4	6.2	3.3	1.3			21.4	18.5		21.9	21.7	18.7	22.2	
NW	2.7	10.5	8.6	4.4	1.3			27.6	18.8		24.2	26.6	27.9	29.8	
VAR	.0	.0	.0	.0	.0			.0	.0		.0	.0	.0	.0	
CALM	2.3	.0	.0	.0	.0			2.3	.0		6.4	1.5	2.1	1.1	
TOT OBS	457	901	728	325	96	2597			16.5		470	748	419	960	
TOT PCT	17.6	38.2	28.0	12.5	3.7			100.0			100.0	100.0	100.0	100.0	

MARCH

PERIOD: (PRIMARY) 1907-1978
(OVER-ALL) 1865-1978

AREA 0026 GULF OF PEILAS
47.05 76.0W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)						MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47	48+			
0000Z	6.4	5.1	27.7	39.4	14.7	6.2	.6	14.8	100.0	470
0600Z	1.5	4.7	27.9	36.1	20.6	7.4	1.9	17.0	100.0	748
1200Z	2.1	4.5	32.5	33.2	19.8	6.2	1.7	16.0	100.0	419
1800Z	1.1	4.1	28.9	34.9	21.8	7.5	1.8	17.2	100.0	960
TOT	6.1	117	732	929	515	182	41	16.5		2597
PCT	2.3	4.5	29.0	35.8	19.8	7.0	1.6		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	1.2	.0	5.0	10.9		7.0
NE	.0	.7	1.2	1.0		6.2
E	.4	.6	.7	1.0		6.0
SE	.4	.4	.8	1.6		6.3
S	3.1	1.8	5.1	3.4		5.0
SW	1.5	1.2	4.1	4.8		6.0
W	1.1	1.9	5.2	10.1		6.7
NW	.9	2.3	8.8	15.2		6.9
VAR	.0	.0	.0	.0		.0
CALM	.7	.4	1.8	1.1		5.6
TOT OBS	26	26	92	138	282	6.4
TOT PCT	9.2	9.2	32.6	48.9	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.6	2.1	1.6	.8	3.0	1.7	.6	.0	.4	.7	5.6	
NE	.0	.0	.9	.8	.0	.1	.0	.0	.0	.0	1.2	
E	.0	.0	.4	.3	.4	.7	.0	.0	.0	.0	1.0	
SE	.4	.0	.1	.4	.7	.0	.1	.0	.0	.0	1.5	
S	.0	.0	1.7	.5	2.7	2.1	.3	.0	.0	.0	5.9	
SW	.4	.1	1.2	.6	4.3	.5	.4	.0	.0	.0	4.1	
W	1.3	.3	3.6	1.7	3.0	2.4	.6	.0	.0	.0	5.3	
NW	.9	.4	2.9	4.4	5.8	3.5	.5	1.1	.0	.4	7.4	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	1.1	.0	.0	.7	.0	.0	.0	.0	2.1	
TOT OBS	10	8	38	27	56	33	7	3	1	3	96	282
TOT PCT	3.5	2.8	13.5	9.6	19.9	11.7	2.5	1.1	.4	1.1	34.0	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	1.0	1.0	1.4	1.4	1.4	1.4	1.4	1.4
>5000	1.4	1.4	2.1	2.4	2.4	2.4	2.4	2.4
>3500	2.4	2.7	4.5	4.8	4.8	4.8	4.8	4.8
>2000	8.2	13.0	16.8	17.8	17.8	17.8	17.8	17.8
>1000	17.8	27.7	35.6	37.0	38.0	38.0	38.0	38.0
>600	21.2	35.3	44.2	45.9	47.3	47.3	47.3	47.3
>300	26.0	45.5	55.1	57.5	59.9	59.9	60.3	60.3
>150	26.0	47.6	57.9	60.3	62.7	62.7	63.0	63.0
>0	26.0	47.6	58.6	61.0	63.7	66.1	66.8	66.8
TOTAL	76	129	171	178	186	193	195	195

TOTAL NUMBER OF OBS: 292

PCT FREQ NH <5/8: 33.2

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
	4.9	5.2	8.1	7.8	6.5	5.8	8.1	12.0	38.0	3.6	308

MARCH

PERIOD: (PRIMARY) 1907-1978
(OVER-ALL) 1805-1978

TABLE 8

AREA 0026 GULF OF PEILAS
47.05 76.0W

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.9	1.0	.0	.0	1.9	
	NO PCP	.9	.0	.0	.3	.2	.1	.3	.1	.0	.0	1.9	
	TOT %	.9	.0	.0	.3	.2	.1	1.2	1.1	.0	.0	3.7	
1/2<1	PCP	.5	.1	.0	.0	.0	.0	.9	.9	.0	.0	1.6	
	NO PCP	.3	.3	.0	.0	.0	.3	.0	.3	.0	.0	1.2	
	TOT %	.9	.4	.0	.0	.0	.3	.9	1.2	.0	.0	2.8	
1<2	PCP	.2	.1	.0	.0	.0	.0	.6	.6	.0	.0	.9	
	NO PCP	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	TOT %	.2	.4	.0	.0	.0	.0	.6	.6	.0	.0	1.2	
2<5	PCP	1.9	.0	.2	.1	.3	1.6	1.6	2.3	.0	.3	8.4	
	NO PCP	1.1	.0	.0	.1	.2	.3	.6	.8	.0	.0	3.1	
	TOT %	3.0	.0	.2	.2	.5	1.9	2.3	3.1	.0	.3	11.5	
5<10	PCP	1.4	.2	.3	.3	.3	1.0	1.9	3.6	.0	.3	9.3	
	NO PCP	4.9	.5	.5	.6	1.7	3.0	6.1	7.9	.0	.6	25.9	
	TOT %	6.3	.6	.9	.9	2.0	4.0	8.0	11.5	.0	.9	35.2	
10+	PCP	.5	.0	.3	.0	.3	.1	.6	.7	.0	.6	3.4	
	NO PCP	5.8	1.9	1.2	1.4	9.1	6.8	6.5	7.2	.0	2.2	42.1	
	TOT %	6.3	1.9	1.5	1.4	9.4	6.9	7.3	7.9	.0	2.8	45.5	
TOT OBS													
TOT PCT		17.6	3.3	2.6	2.8	12.2	13.1	18.8	25.5	.0	4.0	100.0	321

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.2	.4	.0	.0	.0	.0	.0	.0	.6	
	4-10	.2	.0	.0	.0	.2	.1	.0	.4	.0	.0	.9	
	11-21	.6	.0	.0	.0	.0	.0	.9	.0	.0	.0	1.4	
	22+	.0	.0	.0	.0	.0	.0	.2	.7	.0	.0	.9	
	TOT %	.8	.0	.2	.4	.2	.1	1.1	1.0	.0	.0	3.8	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.3	.0	.0	.0	.3	.0	.3	.0	.0	.9	
	11-21	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	
	22+	.2	.1	.0	.0	.0	.0	.0	.9	.0	.0	1.2	
	TOT %	.8	.4	.0	.0	.0	.3	.0	1.2	.0	.0	2.6	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.3	.0	.0	.0	.0	.0	.3	.0	.0	.6	
	11-21	.2	.1	.0	.0	.0	.0	.0	.3	.0	.0	.6	
	22+	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.3	
	TOT %	.2	.4	.0	.0	.0	.0	.1	.7	.0	.0	1.4	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.6	.0	.3	.9	
	4-10	.3	.0	.2	.1	.2	.9	.0	.3	.0	.0	2.0	
	11-21	1.0	.0	.0	.0	.3	.6	.7	.9	.0	.0	3.5	
	22+	1.8	.0	.0	.0	.3	1.8	2.5	.0	.0	.0	6.4	
	TOT %	3.1	.0	.2	.1	.5	1.7	2.5	4.2	.0	.3	12.8	
5<10	0-3	.0	.1	.2	.0	.0	.0	.0	.3	.0	.9	1.4	
	4-10	1.7	.3	.0	.6	.8	2.1	1.6	1.7	.0	.0	8.7	
	11-21	2.2	.1	.3	.3	1.1	1.3	3.8	6.5	.0	.0	15.7	
	22+	2.0	.1	.3	.0	.0	1.3	2.8	2.8	.0	.0	9.3	
	TOT %	5.9	.6	.8	.9	1.9	4.7	8.2	11.3	.0	.9	35.1	
10+	0-3	.5	.0	.0	.0	.3	.3	.0	.1	.0	2.6	3.8	
	4-10	2.0	1.5	1.1	.7	2.7	2.3	1.3	1.2	.0	.0	12.8	
	11-21	2.0	.0	.3	.6	4.5	3.3	4.2	3.4	.0	.0	18.3	
	22+	2.1	.3	.0	.0	1.3	.8	2.2	2.9	.0	.0	9.6	
	TOT %	6.6	1.8	1.4	1.3	8.8	6.7	7.7	7.5	.0	2.6	44.3	
TOT OBS													
TOT PCT		17.4	3.1	2.6	2.7	11.4	13.5	19.6	25.9	.0	3.8	100.0	345

PERIOD: (PRIMARY) 1907-197d
(OVER-ALL) 1865-1978

MARCH

AREA 0026 GULF OF PEILAS
47.05 76.0W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HR (GMT)	0/0	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	1.4	2.9	14.5	14.5	20.3	10.1	.0	.0	.0	1.4	65.2	34.8	69
06009	5.6	1.4	11.1	9.7	16.7	11.1	1.4	1.4	.0	2.8	61.1	38.9	72
12015	4.8	3.6	15.7	4.8	18.1	15.7	2.4	1.2	1.2	.0	67.5	32.5	83
18021	2.8	2.8	11.1	8.3	25.0	13.9	5.6	1.4	.0	.0	70.8	29.2	72
TOT	11	8	39	27	59	38	7	3	1	3	196	100	296
PCT	3.7	2.7	13.2	9.1	19.9	12.8	2.4	1.0	.3	1.0	66.2	33.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	1.2	1.2	2.4	15.7	42.2	37.3	83
06009	4.4	1.1	1.1	15.6	35.6	42.2	90
12015	5.3	4.3	5.3	8.5	34.0	42.6	94
18021	3.4	3.4	2.2	13.5	27.0	50.6	89
TOT	13	9	10	47	123	154	356
PCT	3.7	2.5	2.8	13.2	34.6	43.3	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	1.5	19.1	48.5	22.1	29.4	68
06009	5.7	18.6	41.4	21.4	37.1	70
12015	4.9	25.6	39.0	32.9	28.0	82
18021	2.8	19.4	38.9	33.3	27.8	72
TOT	11	61	122	81	89	292
PCT	3.8	20.9	41.8	27.7	30.5	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
60/64	.0	.3	.0	.6	1.2	.9	.3	.9	14	4.2
55/59	.0	.0	.9	.3	6.3	8.7	11.4	9.9	123	37.5
50/54	.0	.0	.0	.3	5.1	9.6	14.4	15.3	149	44.7
45/49	.0	.0	.0	.9	1.5	2.4	5.4	1.5	39	11.7
40/44	.0	.0	.0	.0	.0	.0	1.2	.0	4	1.2
35/39	.0	.0	.0	.0	.0	.0	.0	.0	2	.6
TOTAL	0	1	3	7	47	72	111	92	333	100.0
PCT	.0	.3	.9	2.1	14.1	21.6	33.3	27.6		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
60/64	.0	.3	.2	.4	1.1	1.4	.3	.6	.0	.0
55/59	7.0	.7	.6	.7	5.8	4.4	6.9	8.9	.0	2.7
50/54	8.9	1.1	1.4	1.3	3.6	3.7	7.9	12.4	.0	4.5
45/49	2.0	.3	.2	.7	.9	2.5	1.7	2.3	.0	1.2
40/44	.0	.0	.0	.3	.0	.0	.6	.0	.0	.3
35/39	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6
TOTAL	17.8	2.4	2.5	3.3	11.3	11.9	17.3	24.2	.0	9.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	64	60	58	52	46	42	38	52.5	473
06009	61	59	57	51	46	43	40	51.5	744
12015	64	59	58	53	46	44	42	52.3	416
18021	66	61	59	53	47	45	42	53.0	883
TOT	66	60	58	52	46	44	38	52.3	2516

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	3.1	18.8	20.3	28.1	29.7	81	128
06009	.0	2.9	10.3	16.2	38.2	32.4	84	68
12015	.0	2.4	9.6	24.1	38.6	25.3	83	83
18021	.0	4.2	15.3	26.4	33.3	20.8	80	72
TOT	0	11	50	76	118	96	82	331

MARCH

PERIOD: (PRIMARY) 1907-1978
(OVER-ALL) 1865-1978

TABLE 17

AREA 0026 GULF OF PEILAS
47.05 76.0W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41 44	45 48	49 52	53 56	57 60	61 64	TOT	W FOG	NO FOG
14/16	.0	.0	.0	.0	.3	.0	1	.0	.3
11/13	.0	.0	.0	.0	.3	.3	2	.0	.6
7/8	.0	.0	.0	.0	1.4	.9	8	.0	2.3
6	.0	.0	.0	.0	.3	.0	1	.0	.3
5	.0	.6	.3	.9	1.4	.0	11	.3	2.8
4	.0	.0	.3	2.3	1.7	.6	17	.3	4.6
3	.0	.0	1.4	4.3	2.3	.6	30	.3	8.3
2	.0	.6	1.1	2.8	1.1	.0	20	.9	4.8
1	.0	.3	2.8	6.6	3.1	.0	45	.6	12.3
0	.0	.3	5.4	7.4	2.8	.0	56	.3	15.7
-1	.0	.9	2.8	5.4	.6	.0	34	.0	9.7
-2	.6	1.4	3.4	5.7	1.1	.0	43	.0	12.3
-3	.0	.9	3.4	2.3	.3	.0	24	.0	6.8
-4	.0	2.0	4.8	.9	.0	.0	27	.0	7.7
-5	.3	.6	1.1	1.1	.0	.0	11	.0	3.1
-6	.3	1.1	2.3	.0	.0	.0	13	.0	3.7
-7/-8	.6	.3	.6	.0	.0	.0	5	.0	1.4
-9/-10	.0	.3	.0	.0	.0	.0	1	.0	.3
-11/-13	.0	.3	.3	.0	.0	.0	2	.0	.6
TOTAL	6	33	106	139	59	8	351	9	342
PCT	1.7	9.4	30.2	39.6	16.8	2.3	100.0	2.6	97.4

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	3.2	.5	.0	.0	.0	3.7	.0	.7	.0	.0	.0	.0	.7
1-2	.0	.7	3.6	.0	.0	.0	4.3	.0	1.4	.0	.0	.0	.0	1.4
3-4	.0	1.2	2.9	.0	.0	.0	4.1	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.5	1.4	2.0	.0	.0	3.9	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	1.2	.5	.0	1.7	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.5	1.0	.0	.0	1.5	.0	.0	.2	.3	.0	.0	.5
10-11	.0	.0	.0	.5	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	1.2	.0	.0	1.2	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.7	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.5	.0	.5	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	5.6	8.8	6.6	1.0	.0	22.1	.0	2.0	.2	.3	.0	.0	2.6

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.5	.0	.0	.0	.0	.5	.0	.2	.0	.0	.0	.0	.2
1-2	.0	.5	.0	.0	.0	.0	.5	.0	.2	.7	.0	.0	.0	.9
3-4	.0	.7	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.7	.0	.0	.0	.0	1.7	.0	.3	.7	.0	.0	.0	1.0

PERIOD: (OVER-ALL) 1963-1978

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AREA 0026 GULF OF PEILAS
47.05 76.0W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.7	.7	.0	.0	.0	.0	1.4	.0	2.0	.0	.0	.0	.0	2.0	
1-2	.0	.7	4.1	.0	.0	.0	4.8	.0	.2	1.4	.0	.0	.0	1.5	
3-4	.0	.7	2.6	.0	.0	.0	3.2	.0	1.4	1.5	.0	.0	.0	2.9	
5-6	.0	.0	.5	.0	.0	.0	.5	.0	.7	1.0	.0	.0	.0	1.7	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.7	.0	.7	.0	.7	.0	.7	.0	.0	1.4	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.7	2.0	7.1	.0	.7	.0	10.5	.0	4.9	3.9	.7	.0	.0	9.5	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.9	.2	.0	.0	.0	1.0	
1-2	.0	1.0	2.6	.0	.0	.0	3.6	.0	2.9	4.8	.0	.0	.0	7.7	
3-4	.0	.7	1.4	.0	.0	.0	2.2	.0	.9	5.1	1.4	.0	.0	7.3	
5-6	.0	1.2	3.6	.0	.0	.0	4.8	.0	.3	3.7	4.8	1.4	.0	10.2	
7	.0	.7	.7	.5	.0	.0	1.9	.0	.0	.0	1.0	.2	.0	1.2	
8-9	.0	.0	1.4	1.2	.0	.0	2.6	.0	.0	.7	2.2	.0	.0	2.9	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	.0	.0	2.2	
12	.0	.0	.7	.0	.0	.0	.7	.0	.0	.0	.9	.0	.0	.9	
13-16	.0	.0	.5	.0	.0	.0	.5	.0	.0	.2	.0	.0	.0	.2	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.2	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.7	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	3.6	10.9	1.7	.0	.0	16.2	.0	4.9	14.6	12.4	2.4	.0	34.4	98.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	3.4	8.1	.7	.0	.0	.0	12.2	
1-2	.0	7.4	16.9	.0	.0	.0	24.3	
3-4	.0	5.4	13.5	1.4	.0	.0	20.3	
5-6	.0	2.7	10.1	6.8	1.4	.0	20.9	
7	.0	.7	.7	2.7	.7	.0	4.7	
8-9	.0	.0	2.7	4.7	.0	.0	7.4	
10-11	.0	.0	.0	2.7	.0	.0	2.7	
12	.0	.0	.7	2.0	.0	.0	2.7	
13-16	.0	.7	.7	1.4	.7	.0	3.4	
17-19	.0	.0	.0	.0	.7	.0	.7	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	3.4	25.0	45.9	21.6	4.1	.0	100.0	148

PERIOD: (OVER-ALL) 1952-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	4.0	6.8	4.8	8.0	2.4	1.6	.8	.4	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	74	4
6-7	.0	.0	1.2	2.4	4.4	5.2	1.2	.8	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	41	8
8-9	.0	.0	3.2	5.2	2.4	6.0	2.6	1.6	.4	.8	.4	.0	.0	.0	.0	.0	.0	.0	.0	59	8
10-11	.0	.0	.4	2.0	.8	2.0	.0	2.0	.4	.8	.4	.0	.0	.0	.0	.0	.0	.0	.0	22	9
12-13	.0	.0	.8	1.6	.0	1.2	.4	.0	.4	1.2	.0	.8	.0	.0	.0	.0	.0	.0	.0	16	11
>13	.0	.0	.0	1.2	.4	.0	.0	1.2	.8	.4	.0	.4	.0	.0	.0	.0	.0	.0	.0	11	11
INDET	4.0	.0	1.2	2.4	.4	.4	.4	.4	.4	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	26	5
TOTAL	20	17	29	57	27	41	16	16	11	8	2	5	0	0	0	0	0	0	0	249	7
PCT	8.0	6.8	11.6	22.9	10.8	16.5	6.4	6.4	4.4	3.2	.8	2.0	.0	.0	.0	.0	.0	.0	.0	100.0	

APRIL

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977AREA 0026 GULF OF PEILAS
47.03 76.1W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG SNOW	NO SIG WEA
N	16.6	3.5	12.6	.0	.0	.0	.0	32.7	1.5	1.5	1.5	.0	.0	.0	62.8
NE	18.4	.0	2.0	.0	.0	.0	.0	20.4	.0	2.0	1.0	.0	.0	.0	77.6
E	.0	.0	16.0	.0	.0	.0	.0	16.0	.0	.0	.0	.0	.0	.0	84.0
SE	25.0	.0	.0	.0	.0	.0	.0	25.0	.0	.0	.0	.0	.0	.0	75.0
S	5.7	.0	.0	.0	.0	.0	.0	5.7	2.1	.0	.0	.0	.0	.0	92.2
SW	5.8	4.4	5.8	.0	.0	.0	.0	16.1	3.6	.0	2.9	.7	.0	.0	76.6
W	5.2	4.3	12.0	.0	.0	.0	2.1	27.6	7.8	.0	.0	1.6	.0	.0	63.0
NW	18.4	6.9	1.4	.0	.0	.0	.0	26.7	2.8	.0	2.3	.0	.0	.0	68.2
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	9.1	.0	.0	.0	.0	.0	.0	9.1	9.1	.0	9.1	.0	.0	.0	72.7
TOT PCT	11.8	4.2	6.1	.0	.0	.0	.4	22.4	3.4	.4	1.5	.4	.0	.0	71.9
TOT OBS:	263														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG SNOW	NO SIG WEA
00003	9.8	4.9	6.6	.0	.0	.0	.0	21.3	3.3	.0	1.6	.0	.0	.0	73.8
06009	13.3	3.3	1.7	.0	.0	.0	1.7	20.0	5.0	.0	.0	.0	.0	.0	75.0
12015	11.7	2.6	7.8	.0	.0	.0	.0	22.1	2.6	.0	5.2	.0	.0	.0	70.1
18021	10.8	5.4	9.5	.0	.0	.0	.0	25.7	4.1	1.4	2.7	1.4	.0	.0	64.9
TOT PCT	11.4	4.0	6.6	.0	.0	.0	.4	22.4	3.7	.4	2.6	.4	.0	.0	70.6
TOT OBS:	272														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.7	3.4	3.9	3.6	1.3	.3		13.1	18.8	13.0	.0	11.7	7.2	12.6	25.0	17.1	15.1	
NE	.2	1.6	1.9	.5	.2	*		4.3	14.0	4.2	.0	3.4	3.9	4.3	.0	4.2	6.4	
E	.3	1.3	.7	.1	.0	.0		2.3	10.0	1.9	.0	2.4	2.9	3.1	.0	2.1	1.8	
SE	.1	1.9	1.4	.7	.1	.0		4.2	13.4	4.7	.0	3.7	3.6	4.3	33.3	4.9	3.4	
S	1.0	5.2	4.6	2.4	.5	.3		13.9	14.9	13.7	25.0	12.2	17.2	15.2	33.3	12.3	13.8	
SW	.4	5.0	6.0	3.6	1.8	.1		16.9	17.9	16.5	.0	19.7	17.5	16.4	.0	14.6	18.6	
W	.4	4.2	7.9	6.0	2.0	.7		21.2	20.2	23.2	.0	23.5	20.3	18.7	.0	20.6	21.1	
NW	.4	4.1	9.3	6.2	1.7	.4		22.3	19.3	20.2	50.0	21.4	26.4	23.4	8.3	23.2	18.6	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	1.6							1.6	.0	.0	25.0	2.1	.7	1.9	.0	1.0	1.0	
TOT OBS	109	570	770	495	162	39	2145		17.6	351	4	341	297	367	3	484	298	
TOT PCT	5.1	26.6	35.9	23.1	7.6	1.8		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	06	12	18	21
N	2.1	4.2	3.8	2.2	.9	13.1	18.8	12.9	9.6	12.7	16.3		
NE	.7	2.4	1.0	.2	.1	4.3	14.0	4.2	3.6	4.3	5.1		
E	.6	1.5	.2	.1	.0	2.3	10.0	1.8	2.7	3.1	2.0		
SE	.9	2.0	1.0	.2	.1	4.2	13.4	4.6	3.7	4.5	4.3		
S	3.1	5.7	3.3	1.1	.6	13.9	14.9	13.8	14.5	15.3	12.9		
SW	1.7	7.5	4.1	3.0	.7	16.9	17.9	16.3	18.7	16.3	16.1		
W	1.7	6.4	8.1	3.7	1.2	21.2	20.2	23.0	22.1	18.6	20.8		
NW	2.0	7.2	8.8	3.2	1.1	22.3	19.3	20.6	23.7	23.3	21.5		
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
CALM	1.6					1.6	.0	2.8	1.4	1.9	1.0		
TOT OBS	310	792	649	294	100	2145	17.6	355	638	370	782		
TOT PCT	14.5	36.9	30.3	13.7	4.7	100.0		100.0	100.0	100.0	100.0		

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977

APRIL

AREA 0026 GULF OF PEILAS
47.05 76.1W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOURL	CALM	1-3	4-10	11-21	22-33	34-47	48+	MEAN	PCT FREQ	TOTAL OBS
0000	4.8	4.2	24.5	38.3	20.0	7.9	2.3	17.2	100.0	335
0600	1.4	3.0	28.1	35.7	23.2	7.1	1.6	17.2	100.0	638
1200	1.9	4.1	27.6	35.9	24.1	4.9	1.6	16.9	100.0	370
1800	1.0	3.3	25.8	34.9	23.9	9.1	1.9	18.4	100.0	782
TOT	34	75	570	770	495	162	39	17.6		2145
PCT	1.6	3.5	26.6	35.9	23.1	7.6	1.8	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	1.4	1.0	3.6	13.3		6.9
NE	.9	.1	1.6	2.8		5.9
E	.5	.5	.3	1.6		6.1
SE	2.4	.5	.9	1.2		3.8
S	3.8	2.4	5.7	2.0		4.5
SW	.7	1.6	6.8	4.2		6.1
W	1.5	1.5	7.7	7.6		6.3
NH	.7	2.0	6.9	8.8		6.6
CALM	.0	.0	.0	.0		.0
VAR	.5	.0	.0	3.2		7.0
TOT OBS	27	21	74	99	221	6.1
TOT PCT	12.2	9.5	33.5	44.8	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.8	.3	2.3	2.3	6.9	1.6	.7	.0	.0	.0	4.5	
NE	.0	.1	.2	.8	1.8	.6	.0	.0	.0	.0	1.9	
E	.0	.0	.3	.0	.5	.3	.0	.0	.0	.0	1.6	
SE	.0	.0	.0	.6	.3	.1	.2	.0	.0	.0	3.7	
S	.5	.0	.5	.7	3.3	.8	.2	.0	.0	.0	8.0	
SW	.0	.0	.0	2.0	3.7	2.4	.6	.0	.0	.0	4.5	
W	.0	.0	1.6	2.0	4.8	1.5	2.5	.0	.5	.5	5.0	
NH	.1	.0	1.4	3.8	3.6	1.4	2.1	.5	.0	.0	5.5	
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
VAR	.0	.0	.5	.5	1.4	.5	.0	.0	.0	.0	.9	
TOT OBS	3	1	15	28	58	20	14	1	1	1	79	221
TOT PCT	1.4	.5	6.8	12.7	26.2	9.0	6.3	.5	.5	.5	35.7	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.4	.4	.9	.9	.9	.9	.9	.9
>5000	.9	.9	1.3	1.3	1.3	1.3	1.3	1.3
>3500	3.1	6.2	6.6	7.5	7.5	7.5	7.5	7.5
>2000	8.4	14.6	15.9	16.8	16.8	16.8	16.8	16.8
>1000	27.9	39.4	42.0	43.4	43.4	43.4	43.4	43.4
>600	31.9	49.6	54.9	56.2	56.2	56.2	56.2	56.2
>300	35.4	54.0	61.1	62.8	62.8	62.8	62.8	62.8
>150	35.4	54.0	61.5	63.3	63.3	63.3	63.3	63.3
>0	36.3	54.9	62.4	64.2	64.2	65.0	65.0	65.0
TOTAL	82	124	141	145	145	147	147	147

TOTAL NUMBER OF OBS: 226

PCT FREQ NH <5/8: 35.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
	5.6	4.7	8.6	7.8	7.8	10.8	8.6	10.3	34.1	1.7	232

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977

APRIL

AREA 0026 GULF OF PEILAS
47.05 76.1W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4	
	TOT %	.3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	PCP	.4	.0	.0	.0	.0	.0	.2	1.0	.0	.0	1.5	
	NO PCP	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.4	
	TOT %	.4	.0	.0	.0	.0	.4	.2	1.0	.0	.0	1.9	
2<5	PCP	1.2	.2	.4	.0	.0	.0	1.0	1.7	.0	.0	4.6	
	NO PCP	1.0	.1	.0	.0	.0	.0	.0	.4	.0	.4	1.9	
	TOT %	2.3	.3	.4	.0	.0	.0	1.0	2.1	.0	.4	6.5	
5<10	PCP	3.8	.7	.0	.0	.4	1.7	2.7	2.6	.0	.4	12.2	
	NO PCP	3.3	1.0	.0	.5	1.1	2.0	3.2	3.6	.0	.4	17.1	
	TOT %	7.1	1.6	.0	.5	1.5	3.7	5.9	6.2	.0	.8	29.3	
10+	PCP	.8	.1	.0	1.1	.4	.4	1.1	.3	.0	.0	4.2	
	NO PCP	8.1	2.7	2.0	2.9	11.5	8.6	10.0	9.0	.0	3.0	57.8	
	TOT %	8.8	2.8	2.0	4.1	11.9	8.9	11.1	9.3	.0	3.0	62.0	
TOT OBS		263											
TOT PCT		18.9	4.7	2.4	4.6	13.4	13.0	18.3	20.6	.0	4.2	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.4	.0	.0	.0	.0	.0	.4	.0	.0	.0	.7	
	22+	.0	.0	.0	.0	.0	.4	.2	.5	.0	.0	1.1	
	TOT %	.4	.0	.0	.0	.0	.4	.2	.9	.0	.0	1.8	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4	
	4-10	.3	.1	.4	.0	.0	.0	.3	.1	.0	.0	1.1	
	11-21	1.0	.4	.0	.0	.0	.0	.7	1.1	.0	.0	3.2	
	22+	1.1	.2	.0	.0	.0	.4	.0	1.6	.0	.0	3.2	
	TOT %	2.3	.6	.4	.0	.0	.4	1.0	2.8	.0	.4	7.7	
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	1.4	
	4-10	1.8	.1	.0	.4	.8	1.8	1.1	1.0	.0	.0	7.0	
	11-21	3.5	1.1	.0	.0	.6	1.3	3.2	4.6	.0	.0	14.4	
	22+	1.8	.4	.0	.0	.4	.7	1.1	2.5	.0	.0	6.7	
	TOT %	7.1	1.5	.0	.4	1.8	3.8	5.4	8.1	.0	1.4	29.5	
10+	0-3	1.1	.4	.0	.0	.4	.0	.4	.4	.0	2.8	5.3	
	4-10	3.5	1.7	1.2	1.7	4.6	3.9	3.2	2.5	.0	.0	24.2	
	11-21	1.2	.4	.6	1.9	3.2	3.6	4.7	3.7	.0	.0	21.4	
	22+	1.1	.1	.0	.2	1.5	1.8	2.4	2.5	.0	.0	9.5	
	TOT %	8.9	2.5	1.8	3.8	11.7	9.3	10.6	8.9	.0	2.8	60.4	
TOT OBS		285											
TOT PCT		18.9	4.6	2.2	4.2	13.4	13.8	17.2	21.1	.0	4.6	100.0	

APRIL

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977AREA 0026 GULF OF PEILAS
47.05 76.1W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET; NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1030 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	1.9	.0	7.5	15.1	17.0	7.5	5.7	1.9	.0	.0	56.6	43.4	53
06009	2.1	.0	2.1	10.6	25.5	12.8	4.3	.0	.0	2.1	59.6	40.4	47
12015	1.5	.0	6.0	14.9	32.8	9.0	7.5	.0	1.5	.0	73.1	26.9	67
18021	1.6	1.6	9.8	9.8	29.5	8.2	6.6	.0	.0	.0	67.2	32.8	61
TOT	4	1	15	29	61	21	14	1	1	1	148	80	228
PCT	1.8	.4	6.6	12.7	26.8	9.2	6.1	.4	.4	.4	64.9	35.1	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.0	3.1	30.8	66.2	65
06009	.0	.0	1.5	4.5	33.3	60.6	66
12015	3.8	1.3	2.5	8.8	23.8	60.0	80
18021	1.2	.0	2.4	13.4	29.3	53.7	82
TOT	4	1	5	23	85	175	293
PCT	1.4	.3	1.7	7.8	29.0	59.7	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET; NM >4/8) BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	1.9	9.6	25.0	32.7	42.3	52
06009	2.1	4.3	17.0	42.6	40.4	47
12015	1.5	7.6	28.8	43.9	27.3	66
18021	1.6	13.1	29.5	37.7	32.8	61
TOT	4	20	58	89	79	226
PCT	1.8	8.8	25.7	39.4	35.0	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.4	.0	.0	.0	.0	.0	1	.4
60/64	.0	.0	.0	.0	.0	1.2	.4	.0	4	1.6
55/59	.0	.0	.0	.4	1.2	8.9	5.4	4.7	53	20.6
50/54	.0	.0	.0	.4	6.6	12.5	16.7	9.9	117	49.5
45/49	.0	.0	.0	.8	4.7	7.0	9.7	5.1	70	27.2
40/44	.0	.0	.0	.0	.4	.4	2.3	1.2	11	4.3
35/39	.0	.0	.0	.0	.0	.0	.4	.0	1	.4
TOTAL	0	0	1	4	33	77	90	52	257	100.0
PCT	.0	.0	.4	1.6	12.8	30.0	35.0	20.2		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0
60/64	.0	.4	.0	.0	.0	.0	.0	.2	.0	.0
55/59	4.2	1.0	.3	.9	.3	1.8	4.8	6.2	.0	1.2
50/54	8.4	1.6	2.5	1.5	3.0	5.8	10.2	10.6	.0	1.9
45/49	4.8	1.1	.0	1.7	7.6	4.7	3.7	3.8	.0	.0
40/44	.7	.5	.0	.0	.8	.4	1.2	.4	.0	.4
35/39	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	19.4	4.5	2.8	4.4	11.7	12.7	19.8	21.2	.0	3.5

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	59	57	56	50	43	39	37	49.8	352
06009	62	57	55	50	43	39	34	49.3	635
12015	59	57	55	50	44	40	38	49.5	372
18021	68	58	57	50	44	41	38	50.6	746
TOT	68	56	56	50	43	40	34	49.9	2105

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.6	14.8	34.4	31.1	18.0	80	61
06009	.0	5.3	19.3	22.8	29.8	22.8	80	57
12015	.0	.0	8.0	29.3	41.3	21.3	83	75
18021	.0	1.4	11.1	30.6	36.1	20.8	81	72
TOT	0	5	34	78	93	55	81	265

APRIL

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977

TABLE 17

AREA 0026 GULF OF PEILAS
47.05 76.1WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37 40	41 44	45 48	49 52	53 56	57 60	61 64	TOT	W FOG	NO FOG
11/13	.0	.0	.0	.8	.0	.0	.0	2	.0	.8
9/10	.0	.0	.0	.0	.0	.0	.4	1	.0	.4
7/8	.0	.0	.0	.0	.0	.8	.4	3	.4	.8
6	.0	.0	.0	.0	.4	.0	.0	1	.0	.4
5	.0	.0	.0	.0	.4	.4	.0	2	.0	.8
4	.0	.0	.0	.0	1.5	.8	.0	6	.4	1.9
3	.0	.0	.4	.8	1.5	1.1	.0	10	.0	3.8
2	.0	.0	.4	2.3	3.1	1.1	.0	18	.4	6.5
1	.0	.4	.4	1.9	6.9	1.1	.0	28	.0	10.7
0	.0	.8	1.5	3.8	5.3	.8	.0	32	.0	12.2
-1	.0	.0	.0	3.4	5.0	.0	.0	22	.0	8.4
-2	.4	.4	5.3	9.9	2.3	.0	.0	48	.4	17.9
-3	.0	.4	2.3	4.2	1.9	.0	.0	23	.0	8.8
-4	.0	.4	4.6	4.2	.0	.4	.0	25	.0	9.5
-5	.0	.0	1.1	3.8	.0	.0	.0	13	.0	5.0
-6	.0	.8	2.7	1.1	.4	.0	.0	13	.4	4.6
-7/-8	.4	.4	1.5	1.1	.0	.0	.0	9	.0	3.4
-9/-10	.0	1.1	.4	.4	.0	.0	.0	5	.4	1.5
-11/-13	.4	.0	.0	.0	.0	.0	.0	1	.4	.0
TOTAL	3	12	54	99	73	17	2	262	7	235
PCT	1.1	4.6	20.6	37.8	28.6	6.5	.8	100.0	2.7	97.3

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	N 22-33	34-47	48+	PCT	1-3	4-10	11-21	NE 22-33	34-47	48+	PCT
<1	.0	1.1	.0	.0	.0	.0	1.1	.8	.0	.0	.0	.0	.0	.8
1-2	.0	5.9	1.9	.0	.0	.0	7.8	.0	1.3	.2	.0	.0	.0	1.5
3-4	.0	4.0	.8	1.1	.0	.0	5.9	.0	1.5	.8	.2	.0	.0	2.5
5-6	.0	.0	2.3	.6	.0	.0	2.9	.0	.0	1.0	.2	.0	.0	1.1
7	.0	.8	.8	.6	.0	.0	2.1	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.8	.0	.0	.8	.0	.0	.0	.8	.0	.0	.8
10-11	.0	.0	.0	2.1	.0	.0	2.1	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	11.8	5.7	5.2	.0	.0	22.7	.8	2.9	1.9	1.1	.0	.0	6.7

HGT	1-3	4-10	11-21	E 22-33	34-47	48+	PCT	1-3	4-10	11-21	SE 22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	.8
1-2	.0	.8	.0	.0	.0	.0	.8	.0	.2	1.0	.0	.0	.0	1.1
3-4	.0	1.3	.0	.0	.0	.0	1.3	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.6	.0	.0	.0	.6	.0	.2	.0	.0	.0	.0	.2
7	.0	.6	.0	.0	.0	.0	.6	.0	.2	.0	.0	.0	.0	.2
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.0	.0	.0	1.5
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.7	.6	.0	.0	.0	3.2	.0	1.3	2.5	.0	.0	.0	3.8

PERIOD: (OVER-ALL) 1963-1977

APRIL

AREA 0026 GULF OF PEILAS
47.05 76.1W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.8	.8	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.0	.0
1-2	.0	2.1	.6	.0	.0	.0	2.7	.0	1.0	.0	.0	.0	.0	1.0
3-4	.0	.8	.8	.0	.0	.0	1.5	.0	1.0	.8	.0	.0	.0	1.7
5-6	.0	.6	.6	.6	.0	.0	1.7	.0	2.2	.2	.2	.0	.0	2.7
7	.0	.8	.6	.0	.0	.0	1.3	.0	.8	1.7	.4	.0	.0	2.9
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	.8
10-11	.0	.0	.8	.0	.0	.0	.8	.0	.0	.8	.2	.0	.0	1.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.8
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.2
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.8
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.8
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	5.0	4.0	.6	.0	.0	9.5	.0	5.0	4.2	1.7	1.5	.0	12.4

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.6	.0	.0	.0	.0	.6	.8	.6	.0	.0	.0	.0	1.3	
1-2	.0	1.1	.8	.0	.0	.0	1.9	.0	1.3	4.0	.0	.0	.0	5.3	
3-4	.0	.6	.8	.0	.0	.0	1.3	.0	.8	.0	1.7	.0	.0	2.5	
5-6	.0	3.4	4.4	.0	.0	.0	7.8	.0	.4	1.0	.0	.0	.0	1.3	
7	.0	.6	2.3	1.9	.0	.0	4.8	.0	.2	1.5	1.7	.0	.0	3.4	
8-9	.0	.0	.8	.0	.0	.0	.8	.0	.0	.0	.8	.0	.0	.8	
10-11	.0	.0	.0	2.1	.0	.0	2.1	.0	.0	.0	1.7	.0	.0	1.7	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.6	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.8	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	6.3	9.0	4.6	.0	.0	19.8	.8	3.2	7.3	5.9	.0	.0	17.2	95.4

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	6.1	3.8	.8	.0	.0	.0	10.7	
1-2	.0	13.7	8.4	.0	.0	.0	22.1	
3-4	.0	9.9	3.8	3.1	.0	.0	16.8	
5-6	.0	6.9	9.9	1.5	.0	.0	18.3	
7	.0	3.8	6.9	4.6	.0	.0	15.3	
8-9	.0	.0	3.1	2.3	.0	.0	5.3	
10-11	.0	.0	1.5	6.1	.0	.0	7.6	
12	.0	.0	.0	.0	.8	.0	.8	
13-16	.0	.0	.0	.8	.0	.0	.8	
17-19	.0	.0	.8	.0	.0	.0	.8	
20-22	.0	.0	.0	.8	.0	.0	.8	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.8	.0	.8	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	6.1	38.2	35.1	19.1	1.5	.0	100.0	131

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	4.2	3.2	13.7	5.3	2.6	2.6	2.6	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	67	4
6-7	.5	.5	1.1	4.2	4.2	1.6	2.6	.0	.3	.0	1.1	.0	.3	.0	.0	.0	.0	.0	.0	32	8
8-9	.0	.0	.0	2.1	2.6	1.1	3.2	.5	.5	.0	.5	1.1	.0	.0	.0	.0	.0	.0	.0	22	10
10-11	.0	1.1	.0	1.6	1.1	4.7	1.1	.0	.0	1.1	.5	.0	.0	.0	.0	.0	.0	.0	.0	21	9
12-13	.0	.0	.0	.5	1.6	.0	1.6	1.6	1.1	1.1	.0	.5	.0	.0	.0	.0	.0	.0	.0	13	12
>13	.0	.0	.0	.5	1.1	.5	.0	1.6	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	10
INDET	4.2	.5	.0	.0	1.1	2.6	2.6	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	24	6
TOTAL	17	10	28	27	23	26	12	6	4	3	1	0	0	0	0	0	0	0	0	190	7
PCT	8.9	5.3	14.7	14.2	14.2	13.2	13.7	6.3	3.2	2.1	2.1	1.6	.5	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1873-1977

MAY

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TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	21.0	1.9	9.0	.0	.0	.0	.0	30.5	1.9	.0	3.8	.0	.0	.0	63.8
NE	19.7	8.5	5.1	.0	.0	.0	.0	32.5	3.4	.0	1.7	.0	.0	.0	62.4
E	13.0	4.7	.0	.0	.0	.0	.0	21.7	.0	.0	17.4	.0	.0	.0	60.9
SE	.0	.0	.0	.0	.0	.0	.0	.0	15.4	.0	.0	.0	.0	.0	84.6
S	9.6	.0	.0	.0	.0	.0	.0	9.6	6.1	.0	.0	.0	.0	.0	84.3
SW	1.6	.0	1.6	.0	.0	.0	.0	3.1	21.9	.0	1.6	.0	.0	.0	73.4
W	8.8	9.4	5.3	.0	.0	.0	.0	23.4	14.0	1.8	1.8	.0	.0	.0	59.1
NW	11.9	12.7	4.0	.0	.0	.0	.0	28.6	5.6	.8	7.9	.0	.0	.0	57.1
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	16.7	.0	.0	.0	.0	.0	.0	16.7	.0	.0	.0	.0	.0	.0	83.3
TOT PCT	13.2	5.5	4.6	.0	.0	.0	.0	22.8	7.3	.5	3.2	.0	.0	.0	66.2
TOT OBS:	219														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00003	13.7	3.9	7.8	.0	.0	.0	.0	25.5	2.0	.0	5.9	.0	.0	.0	66.7
06009	13.6	6.8	5.1	.0	.0	.0	.0	25.4	10.2	.0	1.7	.0	.0	.0	62.7
12015	15.7	2.0	.0	.0	.0	.0	.0	17.6	7.8	2.0	2.0	.0	.0	.0	70.6
18021	14.3	7.9	4.8	.0	.0	.0	.0	25.4	7.9	.0	3.2	.0	.0	.0	63.5
TOT PCT	14.3	5.4	4.5	.0	.0	.0	.0	23.7	7.1	.4	3.1	.0	.0	.0	65.6
TOT OBS:	224														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)								TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+						00	03	06	09	12	15	18	21
N	1.0	2.8	3.6	2.8	.9	.1			11.3	17.1		13.0	.0	12.3	10.5	10.0	50.0	11.4	10.1
NE	.6	2.4	2.1	1.4	.2	.1			6.7	15.0		7.5	33.3	7.6	4.2	7.8	.0	6.8	6.1
E	.4	1.8	1.0	.1	*	.0			3.4	9.7		3.8	.0	4.1	4.5	2.8	.0	2.5	3.5
SE	.4	2.7	2.5	.6	.1	.0			6.2	12.3		6.9	.0	4.6	5.1	7.0	.0	6.1	8.0
S	.8	3.9	3.2	2.3	.8	.2			11.1	16.4		10.9	.0	11.9	10.9	11.6	.0	10.5	11.4
SW	.4	3.9	6.4	4.9	1.7	.6			17.9	20.0		14.8	.0	17.5	19.1	21.4	.0	16.6	19.3
W	.4	4.0	8.5	5.6	2.5	.2			21.2	20.0		22.2	58.3	19.2	20.7	19.0	25.0	23.0	22.4
NW	.5	4.6	7.8	5.0	2.2	.4			20.7	19.2		19.3	8.3	21.2	23.1	19.0	25.0	22.3	18.5
VAR	.0	.0	.0	.0	.0	.0			.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.3								1.3	.0		1.6	.0	1.7	1.8	1.4	.0	1.0	.6
TOT OBS	132	589	792	511	193	37	2254			17.7		370	3	363	328	369	4	500	317
TOT PCT	5.9	26.1	35.1	22.7	8.6	1.6			100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	06	12	18	21
N	2.6	3.2	3.1	2.1	.3		11.3	17.1	12.9	11.4	10.4	10.9	
NE	1.7	2.4	1.6	1.0	.1		6.7	15.0	7.7	6.0	7.7	6.5	
E	1.3	1.7	.4	.1	.0		3.4	9.7	3.8	4.3	2.8	2.9	
SE	1.5	2.9	1.6	.2	.0		6.2	12.3	6.8	4.8	7.0	6.8	
S	2.5	3.7	2.7	1.7	.5		11.1	16.4	10.9	11.4	11.5	10.8	
SW	1.7	6.0	5.8	3.4	1.1		17.9	20.0	14.7	18.3	21.2	17.7	
W	1.6	7.3	7.3	3.6	1.4		21.2	20.0	22.5	19.9	19.0	22.7	
NW	2.5	7.0	6.7	3.2	1.4		20.7	19.2	19.2	22.1	19.1	20.8	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	1.3						1.3	.0	1.6	1.7	1.3	.9	
TOT OBS	379	767	657	344	107	2254		17.7	373	691	373	817	
TOT PCT	16.8	34.0	29.1	15.3	4.7		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1873-1977

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	11-21	22-33	34-47	48+	MEAN	PCT FREQ	TOTAL OBS
0000	1.6	3.2	31.4	33.2	21.2	7.2	2.1	17.1	100.0	373
0600	1.7	4.8	24.3	37.5	21.9	8.5	1.3	17.6	100.0	691
1200	1.3	5.6	27.3	33.5	23.6	6.7	1.9	17.2	100.0	373
1800	.9	4.4	24.7	34.8	23.6	10.0	1.6	18.1	100.0	817
TOT	30	102	589	742	511	193	37	17.7		2294
PCT	1.3	4.5	26.1	35.1	22.7	8.6	1.6		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.5	.6	4.7	12.9		7.2
NE	2.0	.6	1.4	8.3		6.5
E	1.3	.0	.0	1.1		3.7
SE	.2	.8	.3	1.4		5.7
S	3.6	3.0	4.1	3.1		4.4
SW	.6	2.7	4.1	1.6		5.1
W	.9	1.7	11.3	9.3		6.5
NW	2.8	.0	4.2	8.2		6.3
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	1.9	.6		6.5
TOT OBS	19	15	51	74	159	6.1
TOT PCT	11.9	9.4	32.1	46.5	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
	149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
N	1.4	.5	.9	5.0	3.1	2.4	1.7	.0	.0	1.3	2.4	
NE	.2	.2	.3	3.1	2.2	1.3	1.9	.0	.0	.0	3.3	
E	.0	.0	.0	.5	.6	.0	.0	.0	.0	.0	1.3	
SE	.0	.0	.6	.6	.2	.0	.0	.0	.2	.0	1.1	
S	.0	.0	.0	.9	2.2	1.3	1.3	.0	.5	.0	7.7	
SW	.0	.0	.8	2.0	.3	.3	.6	.0	.0	.0	4.9	
W	1.3	.6	.5	7.4	5.5	2.5	.6	.0	.0	.0	4.9	
NW	1.6	.6	.6	2.4	3.5	1.7	1.4	.0	.0	.0	3.5	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.6	.6	.0	.6	.6	.0	.0	.0	
TOT OBS	7	3	6	36	29	15	13	1	1	2	46	159
TOT PCT	4.4	1.9	3.8	22.6	18.2	9.4	8.2	.6	.6	1.3	28.9	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	1.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9
>5000	1.3	1.9	1.9	2.5	2.5	2.5	2.5	2.5
>3500	3.1	6.3	8.1	10.0	10.0	10.0	10.0	10.0
>2000	8.1	14.4	17.5	19.4	19.4	19.4	19.4	19.4
>1000	20.0	31.3	35.6	37.5	37.5	37.5	37.5	37.5
>600	30.0	49.4	57.5	60.0	60.0	60.0	60.0	60.0
>300	32.5	51.9	60.0	63.8	63.8	63.8	63.8	63.8
>150	33.1	53.1	62.5	65.6	65.6	65.6	65.6	65.6
>0	33.8	54.4	66.3	69.4	70.0	70.0	70.0	70.0
TOTAL	54	87	106	111	112	112	112	112

TOTAL NUMBER OF OBS: 160

PCT FREQ NH <5/8: 30.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
7.7	2.4	6.5	7.7	4.8	7.7	9.5	13.7	37.5	168

PERIOD: (PRIMARY) 1906-1977
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VISBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5
	TOT %	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5
1/2<1	PCP	.2	.2	.0	.0	.0	.0	.5	.0	.0	.0	.9	.9
	NO PCP	.7	.0	.5	.0	.0	.0	.2	.0	.0	.0	1.4	1.4
	TOT %	.9	.2	.5	.0	.0	.0	.7	.0	.0	.0	2.3	2.3
1<2	PCP	1.0	1.5	.2	.0	.0	.0	.0	.0	.0	.5	3.2	3.2
	NO PCP	.0	.0	.0	.0	.0	.1	.3	.0	.0	.0	.5	.5
	TOT %	1.0	1.5	.2	.0	.0	.1	.3	.0	.0	.5	3.7	3.7
2<5	PCP	3.1	1.3	.0	.0	.9	.1	.8	1.6	.0	.0	7.8	7.8
	NO PCP	1.4	.0	.0	.3	1.0	.0	.7	.7	.0	.0	4.1	4.1
	TOT %	4.5	1.3	.0	.3	1.9	.1	1.5	2.3	.0	.0	11.9	11.9
5<10	PCP	2.5	1.3	.0	.0	.0	.0	2.1	1.5	.0	.0	7.3	7.3
	NO PCP	3.2	1.7	.0	1.1	3.0	.2	3.9	3.3	.0	.9	17.4	17.4
	TOT %	5.7	3.0	.0	1.1	3.0	.2	5.9	4.8	.0	.9	24.7	24.7
10+	PCP	.5	.1	.3	.0	.3	.1	1.7	.6	.0	.0	3.7	3.7
	NO PCP	11.2	7.1	1.6	1.5	7.9	6.7	10.0	6.1	.0	1.4	53.4	53.4
	TOT %	11.6	7.2	1.9	1.5	8.2	6.8	11.8	6.6	.0	1.4	57.1	57.1
TOT OBS													
TOT PCT													
		24.0	13.4	2.6	3.0	13.1	7.3	19.5	14.4	.0	2.7	100.0	219

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VISBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.5	.1	.4	.0	.0	.0	.0	.6	.0	.0	1.7	1.7
	11-21	.6	.2	.0	.0	.0	.0	.0	.0	.0	.0	.8	.8
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	1.1	.3	.4	.0	.0	.0	.0	.6	.0	.0	2.5	2.5
1<2	0-3	.2	.6	.0	.0	.0	.0	.0	.0	.0	.4	1.2	1.2
	4-10	.3	.7	.2	.0	.0	.0	.0	.0	.0	.0	1.2	1.2
	11-21	.4	.0	.0	.0	.0	.1	.3	.0	.0	.0	.8	.8
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.9	1.3	.2	.0	.0	.1	.3	.0	.0	.4	3.3	3.3
2<5	0-3	1.1	.4	.0	.0	.0	.0	.5	.0	.0	.0	2.1	2.1
	4-10	.0	.4	.0	.1	.7	.0	.7	.1	.0	.0	2.1	2.1
	11-21	1.5	.1	.0	.2	1.0	.0	.3	.2	.0	.0	3.3	3.3
	22+	1.5	.2	.0	.0	.0	.1	.3	1.2	.0	.0	3.3	3.3
	TOT %	4.0	1.1	.0	.3	1.8	.1	1.3	2.1	.0	.0	10.8	10.8
5<10	0-3	.7	.0	.0	.4	.4	.0	.0	.1	.0	.8	2.5	2.5
	4-10	2.1	.4	.0	.2	1.9	.0	.4	.0	.0	.0	5.0	5.0
	11-21	.7	.9	.0	.4	.4	.1	2.2	1.9	.0	.0	6.6	6.6
	22+	1.7	1.3	.0	.0	.0	.1	2.8	2.8	.0	.0	8.7	8.7
	TOT %	5.2	2.7	.0	1.0	2.7	.2	5.4	4.8	.0	.8	22.8	22.8
10+	0-3	1.5	.1	.4	.4	.0	.0	.6	.3	.0	1.7	5.0	5.0
	4-10	2.0	3.0	1.2	.7	3.1	1.6	1.5	2.7	.0	.0	15.8	15.8
	11-21	4.7	2.7	.4	.6	4.7	3.2	6.7	3.5	.0	.0	26.6	26.6
	22+	2.9	1.3	.3	.0	.4	1.6	3.7	2.6	.0	.0	12.9	12.9
	TOT %	11.0	7.2	2.4	1.8	8.2	6.3	12.6	9.1	.0	1.7	60.2	60.2
TOT OBS													
TOT PCT													
		22.5	12.9	3.0	3.1	12.7	6.7	19.6	16.6	.0	2.9	100.0	241

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	3.0	.0	3.0	27.3	21.2	12.1	6.1	3.0	.0	.0	75.8	24.2	33
06009	5.9	.0	.0	20.6	20.6	.0	11.8	.0	2.9	.0	61.8	38.2	34
12015	2.4	2.4	7.3	24.4	17.1	14.6	4.9	.0	.0	2.4	75.6	24.4	41
18021	3.6	3.7	3.7	18.5	14.8	9.3	9.3	.0	.0	1.9	66.7	33.3	54
TOT PCT	7 4.3	3 1.9	6 3.7	36 22.2	29 17.9	15 9.3	13 8.0	1 .6	1 .6	2 1.2	113 69.8	49 30.2	162 100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	1.8	1.8	5.5	14.5	23.6	52.7	55
06009	.0	4.6	6.2	7.7	24.6	56.9	65
12015	.0	3.7	.0	9.3	22.2	64.8	54
18021	.0	1.4	2.8	12.5	19.4	63.9	72
TOT PCT	1 .4	7 2.8	9 3.7	27 11.0	55 22.4	147 59.8	246 100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NH >4/8), BY HOUR

HOURL (GMT)	<150 <50YD	<600 CL	<1000 CS	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	3.0	6.1	45.5	30.3	24.2	33
06009	6.1	6.1	36.4	27.3	36.4	33
12015	2.4	12.2	39.0	36.6	24.4	41
18021	5.7	13.2	35.8	30.2	34.0	53
TOT PCT	7 4.4	16 10.0	62 38.8	50 31.3	48 30.0	160 100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
60/64	.0	.0	.0	.0	.0	.0	.5	1.0	1	.5
55/59	.0	.0	.0	.0	.5	1.5	2.5	1.0	11	5.7
50/54	.0	.0	.0	.5	3.1	8.8	12.4	6.2	60	30.9
45/49	.0	.0	.0	.5	1.5	13.9	17.5	13.4	89	45.9
40/44	.0	.0	.0	.5	1.5	2.1	4.6	4.1	25	12.9
35/39	.0	.0	.0	.0	.0	.5	2.1	1.5	8	4.1
TOTAL	0	0	0	3	11	52	77	51	194	100.0
PCT	.0	.0	.0	1.5	5.7	26.8	39.7	26.3		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
60/64	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0
55/59	1.7	.8	.0	.1	.9	.5	.5	1.2	.0	.0
50/54	7.5	6.2	1.4	.1	3.0	1.9	5.3	5.5	.0	.0
45/49	14.0	2.8	1.5	2.7	8.1	3.1	8.8	3.7	.0	1.0
40/44	2.3	1.7	1.7	.6	2.7	1.3	.0	1.5	.0	1.0
35/39	1.5	.3	.0	.0	.0	.1	.8	.9	.0	.5
TOTAL	27.4	11.9	4.6	3.6	14.7	7.0	15.3	12.9	.0	2.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	57	55	54	47	41	38	36	47.4	375
06009	58	55	54	47	40	36	36	47.2	689
12015	64	55	54	47	40	38	36	47.1	372
18021	60	55	54	48	41	39	35	48.0	793
TOT	64	55	54	48	41	38	35	47.5	2229

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	6.3	8.3	27.1	31.3	27.1	81	48		
06009	.0	.0	5.9	37.3	33.3	23.5	82	51		
12015	.0	.0	6.7	17.8	57.8	17.8	83	45		
18021	.0	.0	1.8	22.8	43.9	31.6	85	57		
TOT	0	3	11	53	83	51	83	201		

MAY

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1873-1977AREA 0026 GULF OF PEILAS
47.15 76.0N

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37 40	41 44	43 48	49 52	53 56	57 60	61 64	TOT	W FOG	NO FOG
9/10	.0	.0	.0	.0	.0	.0	.6	1	.0	.6
6	.0	.0	.0	.0	1.7	.0	.0	3	.0	1.7
5	.0	.0	1.7	1.1	.0	.6	.0	6	.0	3.4
4	.0	.0	.6	1.7	2.4	.6	.0	9	.0	5.1
3	.0	.0	.0	.0	4.5	.0	.0	8	.0	4.5
2	.0	.0	1.1	1.7	1.7	.6	.0	9	.0	5.1
1	.0	.0	1.7	4.0	3.4	.0	.0	16	.0	9.0
0	.0	.0	4.5	3.6	.6	.0	.0	19	.6	10.2
-1	.6	.0	4.5	3.1	1.7	.0	.0	21	.0	11.9
-2	.6	1.1	2.3	3.6	.0	.0	.0	17	.0	9.6
-3	.0	1.7	4.0	3.4	1.7	.0	.0	19	.0	10.7
-4	.0	1.1	3.1	2.3	.6	.0	.0	16	.0	9.0
-5	.0	1.1	3.1	.6	.0	.0	.0	12	.6	6.2
-6	.6	.6	2.8	1.1	.0	.0	.0	9	.0	5.1
-7/-8	.0	1.7	2.8	.6	.0	.0	.0	9	.6	4.5
-9/-10	.0	.6	.6	.0	.0	.0	.0	2	.0	1.1
-14/-16	.6	.0	.0	.0	.0	.0	.0	1	.0	.6
TOTAL	4	14	58	32	3	1	177	3	174	
PCT	2.3	7.9	36.7	22.8	18.1	1.7	.6	100.0	1.7	98.3

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	1.0	1.3	.0	.0	.0	.0	2.3	.3	1.3	.0	.0	.0	.0	1.6
1-2	1.9	3.2	1.3	.0	.0	.0	6.5	1.3	3.2	.0	.0	.0	.0	4.5
3-4	1.3	1.3	.0	.0	.0	.0	2.6	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	1.9	.0	.0	.0	1.9	.0	.0	1.6	.3	.0	.0	1.9
7	.0	.0	2.3	1.9	.0	.0	4.2	.0	.0	.0	.0	.0	.0	.6
8-9	.0	.0	1.0	.0	.0	.0	1.0	.0	.0	1.6	.0	.0	.0	2.9
10-11	.0	.0	.0	1.3	.0	.0	1.3	.0	.0	.0	1.3	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	.3	.0	.0	.3
13-16	1.3	.0	.0	.0	.0	.0	1.3	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	5.5	5.8	6.5	4.2	.0	.0	22.1	1.6	4.3	3.2	2.6	.0	.0	12.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	1.3	.0	.0	.0	.0	1.3	1.3	.0	.0	.0	.0	.0	1.3
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.3	1.3	.0	.0	.0	1.6
5-6	.0	.0	.0	1.0	.0	.0	1.0	.0	.0	.3	.0	.0	.0	.3
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	1.3	.0	.0	.0	1.3	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.3	1.3	1.0	.0	.0	3.6	1.3	.6	1.6	.0	.0	.0	3.6

PERIOD: (OVER-ALL) 1963-1977

MAY

AREA 0026 GULF OF MEXICO
47.15 76.0M

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	1.3	.0	.0	.0	.0	1.3	.0	1.3	.0	.0	.0	.0	1.3	
1-2	.0	3.6	2.6	.0	.0	.0	6.2	.0	.3	.0	.0	.0	.0	.3	
3-4	.0	1.0	3.2	.0	.0	.0	4.2	.0	.3	2.3	.0	.0	.0	2.6	
5-6	.0	.0	1.0	.0	.0	.0	1.0	.0	.0	1.3	.6	.0	.0	1.9	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.6	.0	.0	.0	1.6	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	.0	1.3	
10-11	.0	.0	1.0	.0	.0	.0	1.0	.0	.0	.3	.0	.0	.0	.6	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	1.3	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	5.8	7.8	.0	.0	.0	13.6	.0	1.9	6.8	1.0	1.3	.0	11.0	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1-2	.0	3.2	1.3	.0	.0	.0	4.5	.0	.3	.0	.0	.0	.0	1.0	
3-4	.0	1.0	2.3	.0	.0	.0	3.2	.0	.0	3.9	.0	.0	.0	3.9	
5-6	.0	.0	.0	1.9	.0	.0	1.9	.0	.0	.3	1.3	.0	.0	1.6	
7	.0	.0	2.3	1.3	.0	.0	3.6	.0	.0	.3	.3	.0	.0	.6	
8-9	.0	1.3	.0	1.3	.0	.0	2.6	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	1.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	1.3	.0	.0	1.3	.0	.0	.0	1.3	.0	.0	1.3	
13-16	.0	.0	1.0	1.3	.0	.0	2.3	.0	.0	.3	.0	1.3	.0	1.6	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	1.3	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	5.5	6.8	7.8	1.3	.0	21.4	.0	.3	4.9	2.9	2.6	.0	11.4	98.7

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	3.8	7.7	.0	.0	.0	.0	11.5	
1-2	3.8	14.1	5.1	.0	.0	.0	23.1	
3-4	1.2	3.8	12.8	.0	.0	.0	17.9	
5-6	.0	.0	6.4	5.1	.0	.0	11.5	
7	.0	.0	6.4	3.8	1.3	.0	11.5	
8-9	.0	1.3	5.1	2.6	.0	.0	9.0	
10-11	.0	.0	1.3	2.6	.0	.0	3.8	
12	.0	.0	.0	3.8	.0	.0	3.8	
13-16	1.3	.0	1.3	1.3	1.3	.0	5.1	
17-19	.0	.0	.0	.0	2.6	.0	2.6	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	10.3	26.9	38.5	19.2	5.1	.0	100.0	78

PERIOD: (OVER-ALL) 1952-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	4.2	7.6	3.4	2.5	5.9	1.7	.8	.0	.8	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	33	5
6-7	.0	.8	.8	1.7	3.4	3.4	2.5	1.7	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	18	8
8-9	.0	.0	.0	1.7	8.4	4.2	3.4	.8	3.4	.8	.0	.0	.8	.0	.0	.0	.0	.0	.0	28	10
10-11	.0	4.2	.0	.0	.8	2.5	1.7	.8	2.5	.8	1.7	.0	.0	.0	.0	.0	.0	.0	.0	18	10
12-13	.0	.0	.0	.0	.8	.0	2.5	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	10
>13	.0	.0	.0	.0	.0	.0	.0	.0	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	13
INDEX	6.7	.0	.0	.8	.8	.0	.8	.0	1.7	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	6
TOTAL	13	15	5	.8	24	14	15	4	12	5	3	0	1	0	0	0	0	0	0	119	8
PCT	10.9	12.6	4.2	6.7	20.2	11.8	12.6	3.4	10.1	4.2	2.5	.0	.8	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1870-1977

JUNE

AREA 0026 GULF OF PEILAS
47.05 76.1W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	22.5	11.7	9.0	.0	.0	.0	.0	43.2	11.7	.0	.0	.0	.0	.0	45.0
NE	13.5	2.7	.0	.0	.0	.0	.0	16.2	5.4	.0	.0	.0	.0	.0	78.4
E	33.3	33.3	.0	.0	.0	.0	.0	66.7	.0	.0	.0	.0	.0	.0	33.3
SE	.0	.0	6.3	.0	.0	.0	.0	6.3	25.0	.0	.0	.0	.0	.0	68.8
S	16.7	.0	6.3	.0	.0	.0	.0	22.9	7.3	.0	.0	.0	.0	.0	69.8
SW	.0	.0	2.8	.0	.0	.0	.0	2.8	4.2	.0	.0	.0	.0	.0	93.1
W	.0	6.0	5.1	.0	.0	.0	6.8	17.9	14.5	.0	.0	3.4	.0	.0	94.1
NW	19.8	6.3	9.9	.0	.0	.0	.0	36.0	1.8	.0	3.6	.0	.0	.0	58.6
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	12.6	5.6	6.3	.0	.0	.0	1.4	25.9	8.4	.0	.7	.7	.0	.0	64.3
TOT OBS:	143														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00003	15.8	5.3	2.6	.0	.0	.0	.0	23.7	2.6	.0	.0	.0	.0	.0	73.7
06009	7.9	10.5	10.5	.0	.0	.0	.0	28.9	10.5	.0	2.6	.0	.0	.0	57.9
12015	18.4	.0	7.9	.0	.0	.0	2.6	28.9	13.2	.0	.0	2.6	.0	.0	55.3
18021	8.8	5.9	5.9	.0	.0	.0	5.9	26.5	5.9	.0	.0	.0	.0	.0	67.6
TOT PCT	12.8	5.4	6.8	.0	.0	.0	2.0	27.0	8.1	.0	.7	.7	.0	.0	63.5
TOT OBS:	148														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21
N	.5	2.7	4.9	3.7	2.2	.5	14.6	21.3	14.3	.0	16.3	13.8	14.6	.0	14.1	14.5	
NE	.2	2.1	2.0	1.0	.6	.1	6.0	16.9	5.7	50.0	5.7	6.5	5.4	.0	6.4	5.4	
E	.2	1.4	1.1	.3	.2	.0	3.1	13.6	2.3	.0	3.4	3.8	3.6	.0	3.2	2.8	
SE	.2	1.9	2.0	1.3	.4	.1	6.0	17.2	6.8	.0	8.0	6.8	5.3	.0	4.5	5.2	
S	.5	2.7	4.1	3.0	1.8	.1	12.2	19.3	13.2	25.0	10.7	11.6	12.8	33.3	11.8	12.6	
SW	.3	3.9	6.9	4.0	2.0	.4	17.5	19.4	16.3	25.0	18.1	19.7	17.6	8.3	15.1	19.0	
W	.4	4.2	6.8	4.5	1.7	.7	18.3	19.6	16.7	.0	18.1	18.5	19.1	58.3	18.9	17.9	
NW	.3	4.5	7.0	5.4	2.9	1.1	21.2	21.9	23.1	.0	18.8	17.7	19.7	.0	24.8	22.2	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	1.3						1.3	.0	1.6	.0	.9	1.4	1.9	.0	1.3	.4	
TOT OBS	73	445	661	439	224	56	1898		19.5	310	4	317	279	314	3	395	276
TOT PCT	3.8	23.4	34.8	23.1	11.8	3.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	06	12	18
N	1.7	4.1	4.5	2.8	1.4	14.6	21.3	14.3	14.1	15.1	14.5	14.3
NE	1.2	2.3	1.2	1.2	.1	6.0	16.9	5.7	6.3	6.1	5.4	6.0
E	.8	1.3	.7	.3	.1	3.1	13.6	2.3	2.2	3.6	3.5	3.0
SE	1.2	1.9	1.9	.7	.4	6.0	17.2	6.8	6.7	7.4	5.2	4.8
S	1.6	4.1	3.3	2.5	.6	12.2	19.3	13.2	13.4	11.2	13.0	12.1
SW	1.3	7.4	4.2	3.5	1.0	17.5	19.4	16.3	16.4	18.8	17.5	16.7
W	1.8	6.3	6.2	2.7	1.3	18.3	19.6	16.5	16.5	18.3	19.5	18.5
NW	1.8	6.7	5.8	4.8	2.1	21.2	21.9	23.1	22.9	18.3	19.5	23.7
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.3					1.3	.0	1.6	1.6	1.2	1.9	.9
TOT OBS	240	647	526	352	133	1898		19.5	314	596	317	671
TOT PCT	12.6	34.1	27.7	18.5	7.0	100.0		100.0	100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)							PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47	48+	MEAN		
0000	1.6	4.1	22.3	33.1	27.7	9.6	1.6	18.9	100.0	314
0600	1.2	2.9	24.7	32.7	22.0	13.4	3.2	19.7	100.0	596
1200	1.9	1.6	22.1	36.9	24.3	9.8	3.3	19.4	100.0	317
1800	.9	2.1	23.5	36.5	21.5	12.4	3.1	19.6	100.0	671
TOT	24	49	445	661	439	224	56	19.5		1898
PCT	1.3	2.6	23.4	34.8	23.1	11.8	3.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & Obscd	TOTAL OBS	MEAN CLOUD COVER
N	.0	.6	2.8	13.8		7.6
NE	.0	.8	1.7	3.4		6.8
E	.0	.8	.8	.0		5.0
SE	.8	.2	1.1	.2		4.5
S	1.7	2.3	5.5	7.6		6.2
SW	1.7	1.1	4.4	5.3		6.1
W	1.7	4.0	7.4	8.7		6.1
NW	.0	1.1	4.2	16.1		7.5
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	.0	.0		.0
TOT OBS	7	13	33	65	118	6.7
TOT PCT	5.9	11.0	28.0	55.1	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
.6	.6	2.5	5.9	3.6	1.3	.0	.0	.0	.0	2.5	
.2	.0	.0	.2	3.4	.2	.0	.0	.0	.0	1.9	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.7	
.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	1.9	
.0	.0	.8	5.3	6.1	.8	.0	.0	.0	.0	4.0	
.0	.0	.0	4.0	1.5	2.5	.8	.0	.0	.0	3.6	
.6	.0	.0	6.6	4.4	1.7	1.9	.0	.0	.0	6.6	
.0	1.9	.8	4.7	8.9	1.1	.6	.0	.0	.0	2.3	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
3	3	5	32	33	9	4	0	0	0	29	
2.5	2.5	4.2	27.1	28.0	7.6	3.4	.0	.0	.0	24.6	118
											100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6000	.0	.0	.0	.0	.0	.0	.0	.0
>5000	.0	.0	.0	.0	.0	.0	.0	.0
>3500	.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7
>2000	6.7	9.2	9.2	9.2	9.2	9.2	9.2	9.2
>1000	19.2	35.0	37.5	37.5	38.3	38.3	38.3	38.3
>600	30.0	54.2	61.7	63.3	65.8	65.8	65.8	65.8
>300	30.8	56.7	65.8	67.5	70.0	70.0	70.0	70.0
>150	30.8	57.5	68.3	70.0	72.5	72.5	72.5	72.5
>0	30.8	58.3	70.0	72.5	75.0	75.0	75.0	75.0
TOTAL	37	70	84	87	90	90	90	90

TOTAL NUMBER OF OBS: 120

PCT FREQ NH <5/8: 25.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
.8	1.5	6.1	3.8	11.5	9.9	8.4	9.2	48.9	.0	131

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF PRECIPITATION WITH VARYING VALUES OF VISIBILITY												
VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	PCP	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.7
	NO PCP	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.7
	TOT %	.0	.0	.0	.0	1.4	.0	.0	.0	.0	.0	1.4
1<2	PCP	.0	.0	.0	.0	.0	1.2	.2	.0	.0	.0	1.4
	NO PCP	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.7
	TOT %	.0	.0	.0	.0	.7	.0	1.2	.2	.0	.0	2.1
2<5	PCP	3.1	.0	.7	.2	1.2	.0	1.2	1.9	.0	.0	8.4
	NO PCP	2.3	.3	.0	.0	.0	.0	.0	.2	.0	.0	2.8
	TOT %	5.4	.3	.7	.2	1.2	.0	1.2	2.1	.0	.0	11.2
5<10	PCP	4.7	.2	.0	.0	1.4	.2	.5	4.9	.0	.0	11.9
	NO PCP	1.2	1.4	.0	.9	3.1	1.9	3.5	6.1	.0	.0	18.2
	TOT %	5.9	1.6	.0	.9	4.5	2.1	4.0	11.0	.0	.0	30.1
10+	PCP	.5	.9	.7	.0	.5	.2	.7	.0	.0	.0	3.5
	NO PCP	7.5	3.7	.7	1.7	8.4	10.3	13.3	6.1	.0	.0	51.7
	TOT %	8.0	4.5	1.4	1.7	8.9	10.5	14.0	6.1	.0	.0	55.2
TOT OBS												
TOT PCT												
		19.4	6.5	2.1	2.8	16.8	12.6	20.5	19.4	.0	.0	100.0

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED WITH VARYING VALUES OF VISIBILITY												
VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.6
	11-21	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.6
	22+	.0	.0	.0	.0	.0	.4	.7	.0	.0	.0	1.2
	TOT %	.0	.0	.0	.0	1.2	.0	.4	.7	.0	.0	2.3
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.6
	11-21	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.6
	22+	.0	.0	.0	.0	.0	.6	.4	.1	.0	.0	1.2
	TOT %	.0	.0	.0	.0	.6	.6	1.0	.1	.0	.0	2.3
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6
	11-21	2.3	.9	.0	.1	.4	.0	.6	.3	.0	.0	4.7
	22+	1.6	.0	.6	.0	.6	.0	.4	1.3	.0	.0	4.7
	TOT %	4.5	.9	.6	.1	1.0	.0	1.0	1.7	.0	.0	9.9
5<10	0-3	.0	.0	.0	.0	.6	.0	.0	.0	.6	.0	1.2
	4-10	.4	.0	.6	.6	.0	1.7	1.0	2.0	.0	.0	6.4
	11-21	1.5	.6	.3	.3	2.2	.3	1.7	4.2	.0	.0	11.0
	22+	3.1	.7	.0	.1	1.6	.0	.9	2.9	.0	.0	9.3
	TOT %	4.9	1.3	.9	1.0	4.4	2.0	3.6	9.2	.0	.6	27.9
10+	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.6
	4-10	3.5	.6	.6	.7	4.4	1.9	1.7	2.9	.0	.0	16.3
	11-21	2.8	2.6	.6	.6	3.8	6.3	8.1	2.0	.0	.0	26.7
	22+	1.3	.6	.6	.7	1.6	1.2	3.5	4.5	.0	.0	14.0
	TOT %	7.6	3.8	1.7	2.0	9.7	9.3	13.4	9.4	.0	.6	57.6
TOT OBS												
TOT PCT												
		17.0	6.0	3.2	3.2	16.9	11.9	19.5	21.2	.0	1.2	100.0

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	.0	3.7	3.7	25.9	37.0	7.4	3.7	.0	.0	.0	81.5	18.5	27
06009	6.9	.0	3.4	31.0	17.2	6.9	3.4	.0	.0	.0	69.0	31.0	29
12015	2.8	2.8	2.8	30.6	22.2	11.1	5.6	.0	.0	.0	77.8	22.2	36
18021	.0	3.2	6.5	19.4	38.7	3.2	.0	.0	.0	.0	71.0	29.0	31
TOT	3	3	5	33	35	9	4	0	0	0	92	31	123
PCT	2.4	2.4	4.1	26.8	28.5	7.3	3.3	.0	.0	.0	74.8	25.2	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	2.3	.0	9.1	31.8	56.8	44
06009	.0	.0	2.2	6.7	31.1	60.0	45
12015	.0	4.8	2.4	11.9	31.0	50.0	42
18021	.0	4.3	4.3	17.4	15.2	58.7	46
TOT	0	5	4	20	48	100	177
PCT	.0	2.8	2.3	11.3	27.1	56.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOURL (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.0	11.5	34.6	46.2	19.2	26
06009	6.9	10.3	41.4	27.6	31.0	29
12015	2.9	14.7	50.0	32.4	17.6	34
18021	.0	9.7	38.7	35.5	25.8	31
TOT	3	14	50	42	28	120
PCT	2.5	11.7	41.7	35.0	23.3	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
55/59	.0	.0	.0	.0	.0	.0	2.3	.0	3	2.3
50/54	.0	.0	.0	.0	.8	6.2	14.6	11.5	48	33.1
45/49	.0	.0	.0	1.5	3.8	12.3	10.8	10.0	50	38.5
40/44	.0	.0	.0	.8	1.5	6.9	8.5	5.4	30	23.1
35/39	.0	.0	.0	.0	.0	.0	.8	.8	2	1.5
30/34	.0	.0	.0	.0	.0	.0	.0	1.5	2	1.5
TOTAL	0	0	0	3	8	33	48	38	130	100.0
PCT	.0	.0	.0	2.3	6.2	25.4	36.9	29.2		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
55/59	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
50/54	10.6	4.4	.0	.2	1.9	1.0	4.8	10.2	.0	.0
45/49	6.9	2.3	.8	1.0	4.4	5.0	11.9	6.2	.0	.0
40/44	1.7	1.2	1.5	.4	7.9	4.6	4.6	1.2	.0	.0
35/39	.0	.0	.0	.0	1.3	.2	.0	.0	.0	.0
30/34	.0	.0	.0	.0	.8	.8	.0	.0	.0	.0
TOTAL	20.4	7.9	2.3	1.5	16.3	11.5	21.9	18.1	.0	.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	55	54	52	46	39	37	33	45.6	313
06009	59	53	51	46	39	36	33	45.4	591
12015	54	53	51	45	39	36	32	45.3	314
18021	55	54	52	46	40	38	37	45.9	664
TOT	59	54	51	46	39	37	32	45.6	1882

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	11.1	19.4	33.3	36.1	85	36
06009	.0	.0	10.0	40.0	30.0	20.0	82	30
12015	.0	2.7	2.7	18.9	40.5	35.1	85	37
18021	.0	6.7	.0	26.7	46.7	20.0	82	30
TOT	0	3	8	34	50	38	84	133

PERIOD: (PRIMAR) 1907-1977
(OVER-ALL) 1870-1977

JUNE

AREA 0026 GULF OF PEILAS
47.0S 76.1W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FDG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37 40	41 44	45 48	49 52	53 56	TOT	N FDG	WD FDG
7/8	.0	.0	.9	.0	.0	1	.0	.9
6	.0	.0	.9	.9	.0	2	.0	1.8
5	.0	.0	.0	.0	.9	1	.0	.9
4	.0	.0	.0	.9	1.8	3	.0	2.6
3	.0	.0	.9	1.8	.9	4	.0	3.3
2	.0	.0	1.8	4.4	1.8	9	.0	7.9
1	.0	.0	.0	3.5	2.6	7	.0	6.1
0	.0	.9	2.6	4.4	.0	9	.0	7.9
-1	.0	.9	1.8	6.1	.9	11	.0	9.6
-2	.0	1.8	5.3	5.3	.0	14	.0	12.3
-3	.0	1.8	5.3	1.8	.0	10	.0	8.8
-4	.9	.0	6.1	.0	.0	8	.0	7.0
-5	.0	4.4	7.0	1.8	.0	15	.0	13.2
-6	1.8	4.4	.0	.0	.0	7	.9	5.3
-7/-8	.0	5.3	1.8	.0	.0	8	.0	7.0
-9/-10	.0	2.6	.9	.0	.0	4	.0	3.3
-14/-16	.9	.0	.0	.0	.0	1	.0	.9
TOTAL	4	25	35	35	10	114	.9	113
PCT	3.5	21.9	35.1	30.7	8.8	100.0	.9	99.1

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	1.5	.0	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.0	.0
1-2	.0	3.8	1.5	.0	.0	.0	5.3	.0	.0	.0	.0	.0	.0	.0
3-4	.0	1.1	.0	.0	.0	.0	1.1	.0	.0	1.5	.0	.0	.0	1.5
5-6	.0	.0	2.3	.0	.0	.0	2.3	.0	.0	3.4	.0	.0	.0	3.4
7	.0	.0	2.7	.0	.0	.0	2.7	.0	.0	.4	.0	.0	.0	.4
8-9	.0	.0	.0	1.1	1.1	.0	2.3	.0	.0	.0	.0	.4	.0	.4
10-11	.0	.0	.0	1.5	.0	.0	1.5	.0	.0	.0	1.5	.0	.0	1.5
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	1.1	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	6.4	6.4	3.8	1.1	.0	17.8	.0	.0	5.3	1.5	.4	.0	7.2

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	1.5	.0	.0	.0	.0	1.5	.0	.0	.0	1.5	.0	.0	1.5
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	1.5	.0	.0	1.5	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.5	.0	1.5	.0	.0	3.0	.0	.0	.0	1.5	.0	.0	1.5

PERIOD: (OVER-ALL) 1963-1977

JUNE

AREA 0026 GULF OF PEILAS
47.05 76.1W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	3.0	1.5	.0	.0	.0	4.5	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	1.5	1.5	.0	.0	3.0	.0	1.5	3.4	.0	.0	.0	4.9
5-6	.0	.0	2.7	3.0	.0	.0	5.7	.0	.0	2.3	1.5	.0	.0	3.8
7	.0	.0	.0	.0	.0	.0	.0	.0	1.5	1.5	.0	.0	.0	3.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.0	.0	.0	.0	3.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	1.5	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	3.0	7.2	4.5	.0	.0	14.8	.0	3.0	10.2	1.5	.0	.0	14.8

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	1.1	3.4	.0	.0	.0	4.5	.0	4.2	1.1	.0	.0	.0	.0	5.3
3-4	.0	1.1	1.1	.0	.0	.0	2.3	.0	.8	1.5	.0	.0	.0	.0	2.3
5-6	.0	.0	2.3	1.1	.0	.0	3.4	.0	.8	1.9	.0	.0	.0	.0	2.7
7	.0	.0	4.5	4.5	.0	.0	9.1	.0	.0	1.5	1.5	.0	.0	.0	3.0
8-9	.0	.0	.0	2.3	.0	.0	2.3	.0	.0	.0	1.1	.0	.0	.0	1.1
10-11	.0	.0	.0	1.5	.0	.0	1.5	.0	.0	.0	1.5	.0	.0	.0	1.5
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	.0	.0	.0	1.9
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.3	11.4	9.5	.0	.0	23.1	.0	4.9	4.9	8.0	.0	.0	17.8	100.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	.0	1.5	.0	.0	.0	.0	1.5	
1-2	.0	12.1	7.6	.0	.0	.0	19.7	
3-4	.0	6.1	9.1	3.0	.0	.0	18.2	
5-6	.0	.0	13.6	7.6	.0	.0	21.2	
7	.0	1.5	10.6	7.6	.0	.0	19.7	
8-9	.0	.0	3.0	4.5	1.5	.0	9.1	
10-11	.0	.0	.0	6.1	.0	.0	6.1	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	3.0	.0	.0	3.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	1.5	.0	.0	.0	1.5	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	21.2	45.5	31.8	1.5	.0	100.0	66

PERIOD: (OVER-ALL) 1951-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.1	6.3	2.1	8.4	2.1	3.2	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	23	5
6-7	.0	.0	4.2	2.1	5.3	3.2	2.1	2.1	6.3	.0	1.1	.0	.0	.0	.0	.0	.0	.0	.0	25	9
8-9	.0	.0	.0	1.1	5.3	1.1	4.2	8.4	.0	4.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	23	10
10-11	.0	.0	.0	.0	3.2	2.1	2.1	6.3	.0	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	10
12-13	.0	.0	.0	1.1	.0	.0	1.1	1.1	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	10
>13	.0	.0	.0	.0	1.1	2.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	8
INDET	.0	.0	.0	.0	2.1	.0	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	8
TOTAL	1	6	6	12	18	11	10	17	8	5	1	0	0	0	0	0	0	0	0	95	8
PCT	1.1	6.3	6.3	12.6	18.9	11.6	10.5	17.9	8.4	5.3	1.1	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1854-1977

JULY

AREA 0026 GULF OF PEILAS
47.15 76.3W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA						
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA	
N	27.2	2.0	8.9	.0	.0	.0	.0	31.0	16.7	.0	2.0	.0	.0	.0	50.2	
NE	15.1	.0	6.8	.0	.0	.0	.0	21.9	19.2	.0	5.5	.0	.0	.0	53.4	
E	.0	.0	8.3	.0	.0	.0	.0	8.3	6.3	.0	8.3	.0	.0	.0	77.1	
SE	2.8	.0	.0	.0	.0	.0	.0	2.8	2.8	.0	.0	.0	.0	.0	94.4	
S	9.5	5.4	.0	.0	.0	.0	.0	14.9	.0	.0	.0	.0	.0	.0	85.1	
SW	.0	2.4	1.2	.0	4.7	.0	.0	8.2	4.7	.0	9.4	.0	1.2	.0	76.5	
W	2.5	0.4	1.9	.0	.0	.0	1.9	12.7	21.7	.0	.0	.0	1.9	.0	63.7	
NW	7.3	4.9	3.0	.0	.0	.0	.0	15.9	6.1	.0	4.9	.0	.0	.0	73.2	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	33.3	.0	.0	.0	66.7	
TOT PCT	8.9	3.3	4.2	.0	.5	.0	.5	17.4	11.7	.0	3.8	.0	.5	.0	66.7	
TOT OBS:	213															

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00003	12.8	4.3	6.4	.0	.0	.0	.0	23.4	10.6	.0	4.3	.0	.0	.0	61.7
06009	8.8	3.5	1.8	.0	1.8	.0	.0	15.8	19.8	.0	.0	.0	1.8	.0	66.7
12015	8.9	.0	3.6	.0	.0	.0	1.8	14.3	14.3	.0	1.8	.0	.0	.0	69.6
18021	7.0	5.3	5.3	.0	.0	.0	.0	17.5	7.0	.0	8.8	.0	.0	.0	66.7
TOT PCT	9.2	3.2	4.1	.0	.5	.0	.5	17.5	12.0	.0	3.7	.0	.5	.0	66.4
TOT OBS:	217														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	0-3	WIND SPEED (KNOTS)						48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
		4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	.3	1.9	2.9	4.2	1.2	.8		11.2	22.9		12.4	41.7	11.7	10.0	10.2	.0	11.3	11.2
NE	.2	1.8	1.9	1.1	.1	.2		5.3	16.2		5.8	16.7	5.3	5.5	6.3	.0	4.9	3.8
E	.3	1.7	1.8	.5	.1	*		4.5	12.8		4.6	.0	5.3	3.9	4.8	.0	4.4	3.9
SE	.3	3.3	3.1	.8	.1	.0		7.7	13.0		7.6	.0	6.4	7.3	8.3	.0	8.0	8.6
S	.3	2.8	3.7	1.7	.3	.1		8.8	15.8		8.7	.0	7.7	7.8	11.3	.0	9.5	7.6
SW	.4	4.5	4.9	3.5	.7	.5		14.4	17.6		14.1	.0	17.5	14.0	14.1	.0	12.8	14.7
W	.3	5.0	7.9	5.6	1.7	.4		21.0	18.9		22.2	.0	19.4	24.1	20.1	33.3	18.7	23.2
NW	.5	4.0	8.1	8.5	4.1	.6		25.7	22.3		23.5	41.7	25.0	26.4	23.6	66.7	28.8	25.7
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.4							1.4	.0		1.1	.0	1.7	1.0	1.4	.0	1.6	1.2
TOT OBS	86	549	755	567	183	56	2196		18.6		352	3	300	300	366	3	488	324
TOT PCT	3.9	25.0	34.4	25.8	8.3	2.6		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	1.2	2.6	3.3	3.0	1.0		11.2	22.9	12.6	10.9	10.2	11.3	
NE	1.0	2.1	1.4	.6	.2		5.3	16.2	5.9	5.4	6.2	4.5	
E	1.0	2.3	1.0	.2	*		4.5	12.8	4.6	4.7	4.8	4.2	
SE	1.2	4.5	1.4	.6	*		7.7	13.0	7.5	6.8	8.2	8.2	
S	1.2	4.1	2.4	1.0	.2		8.8	15.8	8.7	7.8	11.2	8.7	
SW	2.0	5.6	4.1	2.0	.7		14.4	17.6	13.9	15.9	14.0	13.5	
W	2.3	7.3	6.9	3.7	.8		21.0	18.9	22.0	21.5	20.2	20.5	
NW	1.9	6.9	8.5	6.5	2.0		25.7	22.3	23.7	25.6	23.9	27.6	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	1.4						1.4	.0	1.1	1.4	1.4	1.5	
TOT OBS	291	776	636	383	110	2196		18.6	355	660	369	812	
TOT PCT	13.3	35.3	29.0	17.4	5.0		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1854-1977

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AREA 0026 GULF OF PEILAS
47.15 76.3W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	1.1	2.5	26.8	32.1	27.9	7.3	2.3	18.7	100.0	355
0600Z	1.4	2.6	22.7	35.9	26.1	9.2	2.1	18.9	100.0	660
1200Z	1.4	3.0	28.5	35.2	23.8	5.7	2.4	17.3	100.0	369
1800Z	1.5	2.3	24.5	33.7	25.6	9.2	3.1	19.0	100.0	812
TOT	30	96	549	755	567	183	56	18.6		2196
PCT	1.4	2.6	25.0	34.4	25.8	8.3	2.6	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	# & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	2.4	2.0	3.5	13.7		6.6
NE	2.0	.5	1.0	2.9		5.2
E	2.1	.4	1.3	2.5		5.1
SE	1.8	.8	.8	1.2		4.4
S	2.5	1.8	2.5	1.4		4.0
SW	2.1	1.7	4.8	2.5		5.2
W	2.4	2.9	5.8	8.1		5.9
NW	2.6	4.6	6.4	6.9		5.5
VAR	.0	.0	.0	.0		.0
CALM	.5	.0	.0	.0		6.5
TOT OBS	35	28	50	78	191	5.6
TOT PCT	18.3	14.7	26.2	40.8	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

AND OCCURRENCE OF NH <5/8 T WIND DIRECTION											
000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
1.6	1.4	1.2	1.7	9.0	.4	.5	.0	.0	.0	5.8	
.0	.0	1.4	.1	1.2	.7	.0	.0	.5	.0	2.5	
.5	.0	.5	.0	.9	1.3	.0	.0	.0	.0	3.0	
.1	.0	.0	.1	.5	.7	.5	.0	.0	.0	2.6	
.4	.0	.0	.9	1.6	.5	.0	.0	.0	.0	4.8	
.5	.0	.5	1.4	2.4	2.0	.0	.0	.0	.5	3.8	
.0	1.3	.0	1.7	6.9	1.6	1.0	.0	.0	.0	6.5	
.0	1.4	.0	1.3	5.2	2.4	.5	.0	.5	.0	9.2	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.5	.0	.5	.0	.0	.0	.0	.0	.0	.0	1.0	
.7	.8	.8	14	53	18	.5	.0	2	1	75	
3.7	4.2	4.2	7.3	27.7	9.4	2.6	.0	1.0	.5	39.3	
										100.0	

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	# OR >10	# OR >5	# OR >2	# OR >1	# OR >1/2	# OR >1/4	# OR >50YD	# OR >0
# OR >6500	.5	1.0	1.6	1.6	1.6	1.6	1.6	1.6
# OR >5000	.5	1.0	1.6	1.6	1.6	1.6	1.6	1.6
# OR >3500	1.6	3.6	4.2	4.2	4.2	4.2	4.2	4.2
# OR >2000	7.3	12.0	13.0	13.5	13.5	13.5	13.5	13.5
# OR >1000	24.0	37.0	39.6	41.1	41.1	41.1	41.1	41.1
# OR >600	28.6	44.3	46.9	48.4	48.4	48.4	48.4	48.4
# OR >300	30.2	46.9	51.0	52.6	52.6	52.6	52.6	52.6
# OR >150	30.7	49.5	54.7	56.8	56.8	56.8	56.8	56.8
# OR >0	31.3	51.0	56.8	58.9	59.9	60.4	60.4	60.4
TOTAL	60	98	109	113	115	116	116	116

TOTAL NUMBER OF OBSI 192

PCT FREQ NH <5/8 39.6

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
	4.5	7.0	11.4	4.5	11.4	7.0	9.5	8.5	33.3	3.0	201

PERIOD: (PRIMARY) 1907-1977
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TABLE 8

AREA 0026 GULF OF PEILAS
47.1S 76.3W

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.5	.5
	TOT %	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.5	.5
1/2<1	PCP	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.5
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.5	.5
	TOT %	.5	.0	.0	.0	.0	.0	.0	.0	.0	.5	.9	.9
1<2	PCP	.5	.0	.0	.0	.0	.0	.0	.5	.0	.0	.9	.9
	NO PCP	.5	.0	.4	.1	.0	.0	.0	.5	.0	.0	1.4	1.4
	TOT %	.9	.0	.4	.1	.0	.0	.0	.9	.0	.0	2.4	2.4
2<5	PCP	1.9	1.1	.0	.0	.0	.0	.0	.8	.0	.0	3.8	3.8
	NO PCP	.8	.1	.0	.0	.0	.9	.4	.1	.0	.0	2.4	2.4
	TOT %	2.7	1.2	.0	.0	.0	.9	.4	.9	.0	.0	6.2	6.2
5<10	PCP	3.9	.2	.5	.0	.0	.7	1.2	.6	.0	.0	7.1	7.1
	NO PCP	4.1	1.4	.0	.9	.0	1.5	5.8	4.6	.0	.0	18.5	18.5
	TOT %	8.1	1.7	.5	.9	.0	2.3	7.0	5.2	.0	.0	25.6	25.6
10+	PCP	.7	.6	.0	.1	1.3	.1	1.2	1.2	.0	.0	5.2	5.2
	NO PCP	10.8	5.2	4.4	3.1	7.5	6.3	10.1	11.0	.0	.9	59.2	59.2
	TOT %	11.5	5.8	4.4	3.2	8.8	6.4	11.3	12.2	.0	.9	64.5	64.5
TOT OBS													
TOT PCT													
		23.7	8.6	5.7	4.3	8.8	9.6	18.6	19.3	.0	1.4	100.0	211

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.4	.4
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.4	.4
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4	.4
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4
	TOT %	.4	.0	.0	.0	.0	.0	.0	.0	.0	.4	.9	.9
1<2	0-3	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.4	.4
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4
	22+	.4	.0	.3	.3	.2	.0	.0	.9	.0	.0	2.1	2.1
	TOT %	.9	.0	.3	.3	.2	.4	.0	.9	.0	.0	3.0	3.0
2<5	0-3	.3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4	.4
	4-10	.4	.4	.0	.0	.0	.4	.3	.5	.0	.0	2.1	2.1
	11-21	.4	.0	.0	.0	.0	.4	.0	.4	.0	.0	1.3	1.3
	22+	1.3	.6	.0	.0	.0	.0	.0	.2	.0	.0	2.1	2.1
	TOT %	2.5	1.1	.0	.0	.0	.9	.3	1.3	.0	.0	6.0	6.0
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	.4
	4-10	.7	.1	.0	.9	.0	.4	1.1	.6	.0	.0	3.8	3.8
	11-21	1.6	1.2	.4	.0	.0	.7	3.1	1.1	.0	.0	8.1	8.1
	22+	4.9	.2	.0	.0	.0	.9	2.1	2.6	.0	.0	10.7	10.7
	TOT %	7.3	1.5	.4	.9	.0	2.0	6.3	4.7	.0	.0	23.1	23.1
10+	0-3	.4	.4	.4	.0	.0	.4	.0	.0	.0	1.3	3.0	3.0
	4-10	3.4	2.1	2.9	2.7	1.5	1.5	1.3	2.6	.0	.0	17.9	17.9
	11-21	3.4	2.1	1.5	.9	4.7	4.2	6.9	4.1	.0	.0	27.8	27.8
	22+	3.1	2.0	.4	.4	3.0	1.8	2.8	4.4	.0	.0	17.9	17.9
	TOT %	10.4	6.7	5.2	4.0	9.2	7.9	11.0	11.0	.0	1.3	66.7	66.7
TOT OBS													
TOT PCT													
		21.4	9.3	6.4	5.1	9.4	11.2	17.6	17.8	.0	1.7	100.0	234

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PERIOD: (PRIMARY) 1907-1977
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <3/8 ANY MGT	TOTAL OBS
00603	4.3	6.5	2.2	6.5	23.9	4.3	2.2	.0	2.2	.0	52.2	47.8	46
06609	.0	2.0	4.1	6.1	34.7	12.2	2.0	.0	2.0	.0	63.3	36.7	49
12615	4.1	4.1	6.1	8.2	20.4	12.2	2.0	.0	.0	.0	57.1	42.9	49
18621	5.8	3.8	5.8	7.7	28.8	9.6	3.8	.0	.0	1.9	67.3	32.7	52
TOT	7	8	9	14	53	19	5	0	2	1	118	78	196
PCT	3.6	4.1	4.6	7.1	27.0	9.7	2.6	.0	1.0	.5	60.2	39.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00603	.0	.0	2.0	13.7	23.5	60.8	91
06609	.0	.0	6.3	3.2	27.0	63.5	63
12615	.0	1.7	1.7	1.7	18.6	76.3	59
18621	1.5	1.5	1.5	6.2	21.5	67.7	65
TOT	1	2	7	14	54	160	238
PCT	.4	.8	2.9	5.9	22.7	67.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOUR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00603	4.5	13.6	29.5	27.3	43.2	44
06609	.0	6.1	18.4	46.9	34.7	49
12615	4.2	14.6	25.0	31.3	43.8	48
18621	5.9	13.7	25.5	41.2	33.3	51
TOT	7	23	47	71	74	192
PCT	3.6	12.0	24.5	37.0	38.5	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
55/59	.0	.5	.0	.0	.0	1.0	.0	.0	3	1.5
50/54	.0	.0	.0	.5	2.5	3.0	4.0	.0	28	13.9
45/49	.0	.0	.5	.5	7.0	18.9	18.9	8.5	105	52.2
40/44	.0	.0	.0	1.0	3.5	7.5	8.5	6.0	53	26.4
35/39	.0	.0	.0	.0	.5	2.0	2.0	.5	10	5.0
30/34	.0	.0	.0	.0	.0	.0	1.0	.0	2	1.0
TOTAL	0	1	1	4	27	65	69	34	201	100.0
PCT	.0	.5	.5	2.0	13.4	32.3	34.3	16.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.1	.4	.0	.0	.5	.0	.5	.0	.0
4.4	1.1	.5	.6	1.4	1.2	2.2	2.5	.0	.0
12.7	5.1	2.1	1.9	5.2	4.4	11.3	8.6	.0	1.0
3.6	1.2	2.2	1.4	4.1	4.4	3.4	5.6	.0	.5
.0	.5	1.0	.5	.7	.2	.9	.1	.0	1.0
.0	.1	.4	.0	.0	.5	.0	.0	.0	.0
20.6	8.2	6.6	4.4	11.4	11.2	17.8	17.3	.0	2.5

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00603	59	52	50	45	39	34	33	44.7	352
06609	54	51	50	45	39	35	32	44.5	653
12615	58	52	50	45	38	35	34	44.6	365
18621	56	52	51	45	39	37	33	45.3	787
TOT	59	52	50	45	39	35	32	44.8	2157

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00603	.0	4.3	14.9	25.5	34.0	21.3	82	47		
06609	.0	1.9	9.4	32.1	43.4	13.2	80	53		
12615	.0	3.8	17.0	34.0	30.2	15.1	78	53		
18621	.0	2.0	13.7	37.3	29.4	17.6	79	51		
TOT	0	6	28	66	70	34	80	204		

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	33 36	37 40	41 44	45 48	49 52	53 56	57 60	TOT	W FOG	NO FOG
9/10	.0	.0	.0	.5	.0	.0	.0	1	.0	.5
7/8	.0	.0	.0	.0	.0	.5	.0	1	.0	.5
6	.0	.0	.0	.0	1.4	.0	.0	3	.0	1.4
5	.0	.0	.0	.5	.5	.0	.0	2	.0	1.0
4	.0	.0	.0	1.0	.5	.5	.0	4	.0	1.9
3	.0	.0	.0	.5	2.9	.5	.0	8	.0	3.9
2	.0	.0	.5	.5	3.9	.5	.0	11	1.4	3.9
1	.0	.0	.0	1.9	2.9	.0	.0	10	.0	4.8
0	.0	.0	1.0	2.9	4.8	.0	.5	19	.5	8.7
-1	.0	.0	1.0	4.3	5.3	.0	.0	22	.0	10.6
-2	.0	.0	1.4	6.3	1.0	.0	.0	18	.0	8.7
-3	.0	.5	2.9	5.8	1.0	.0	.0	21	.0	10.1
-4	.0	.0	3.9	6.3	1.0	.0	.0	23	.0	11.1
-5	.0	.0	3.4	4.8	1.0	.0	.0	19	.5	8.7
-6	.0	1.0	3.9	.5	.5	.0	.0	12	.0	5.8
-7/-8	.5	1.0	4.8	2.9	.0	.0	.0	19	.5	8.7
-9/-10	.0	1.0	1.9	.0	.0	.0	.0	6	.5	2.4
-11/-13	.0	2.4	1.0	.0	.0	.0	.0	7	.5	2.9
-14/-16	.5	.0	.0	.0	.0	.0	.0	1	.0	.5
TOTAL	2	12	53	80	55	4	1	207	8	199
PCT	1.0	5.8	25.6	38.6	26.6	1.9	.5	100.0	3.9	96.1

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.7	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
1-2	.0	2.7	.0	.0	.0	.0	2.7	.0	2.2	.0	.0	.0	.0	2.2
3-4	.0	.9	2.7	.0	.0	.0	3.6	.0	.9	.4	.0	.0	.0	1.3
5-6	.0	.0	3.3	1.6	.0	.0	4.9	.0	.0	.0	1.1	.0	.0	1.1
7	.0	.0	.0	.7	.0	.0	.7	.0	.0	.0	1.1	.0	.0	1.1
8-9	.0	.9	.0	2.2	.7	.0	3.8	.0	.0	.0	.0	.2	.0	.2
10-11	.0	.0	.0	3.1	.0	.0	3.1	.0	.0	.0	.2	.0	.0	.2
12	.0	.0	.0	1.6	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.9	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.7	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.7	4.5	6.0	10.7	.7	.0	22.5	.0	3.1	.4	2.5	.2	.0	6.3

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.9	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0
1-2	.0	2.9	1.8	.0	.0	.0	4.7	.0	2.0	.2	.0	.0	.0	2.2
3-4	.0	.0	.9	.0	.0	.0	.9	.0	2.9	.0	.0	.0	.0	2.9
5-6	.0	.9	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.9
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.7	.0	.7	.0	.9	.0	.0	.2	.0	1.1
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.9	3.8	2.7	.0	.7	.0	8.0	.0	5.8	1.1	.0	.2	.0	7.1

PERIOD: (OVER-ALL) 1962-1977

JULY

AREA 0026 GULF OF PEILAS
47.15 76.3W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.9
1-2	.0	.0	.7	.0	.0	.0	.7	.0	2.7	.0	.0	.0	.0	2.7
3-4	.0	1.6	.9	.9	.0	.0	3.3	.0	1.8	1.6	.0	.0	.0	3.3
5-6	.0	.0	3.6	.9	.0	.0	4.5	.0	.0	1.8	.2	.0	.0	2.0
7	.0	.0	.7	.0	.0	.0	.7	.0	.0	1.1	.0	.0	.0	1.1
8-9	.0	.0	.0	.9	.0	.0	.9	.0	.0	.0	.9	.0	.0	.9
10-11	.0	.0	.0	.9	.0	.0	.9	.0	.0	.0	.9	.0	.0	.9
12	.0	.0	.0	.9	.0	.0	.9	.0	.0	.0	.9	.0	.0	.9
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.6	5.8	4.5	.0	.0	11.8	.9	4.5	4.5	2.9	.0	.0	12.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	
1-2	.0	.9	.0	.0	.0	.0	.9	.0	.9	.9	.0	.0	.0	1.8	
3-4	.0	.9	5.6	.9	.0	.0	7.4	.0	.0	1.3	.9	.0	.0	2.2	
5-6	.0	.7	2.7	1.6	.0	.0	4.9	.0	.2	.2	.0	.0	.0	.4	
7	.0	.0	.9	.0	.0	.0	.9	.0	.0	1.8	.9	.0	.0	2.7	
8-9	.0	.0	.0	.9	.0	.0	.9	.0	.0	.0	.4	.0	.0	.4	
10-11	.0	.0	.0	.7	.0	.0	.7	.0	.0	.0	3.1	.0	.0	3.1	
12	.0	.0	.0	1.8	.0	.0	1.8	.0	.0	.0	1.1	.9	.0	2.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.2	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	2.5	9.2	5.8	.0	.0	17.4	.2	1.1	4.2	6.7	.9	.0	13.2	99.1

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	3.6	.0	.0	.0	.0	.0	3.6	
1-2	.0	14.3	3.6	.0	.0	.0	17.9	
3-4	.0	8.9	13.4	2.7	.0	.0	25.0	
5-6	.0	1.8	11.6	5.4	.0	.0	18.8	
7	.0	.0	5.4	2.7	.0	.0	8.0	
8-9	.0	.9	.0	5.4	.9	.0	7.1	
10-11	.0	.0	.0	8.9	.0	.0	8.9	
12	.0	.9	.0	6.3	1.8	.0	8.9	
13-16	.0	.0	.0	.9	.0	.0	.9	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.9	.0	.0	.9	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	3.6	26.8	33.9	33.0	2.7	.0	100.0	112

PERIOD: (OVER-ALL) 1952-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.0	3.4	6.7	5.6	3.4	2.8	1.7	2.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	46
6-7	.0	.0	6.1	5.6	4.5	2.2	1.1	1.7	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	42
8-9	.0	.0	2.2	1.7	2.8	4.5	2.8	3.4	1.7	.6	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	36
10-11	.0	.6	.6	1.1	1.1	2.8	2.8	2.2	2.8	.0	6.1	.6	.0	.0	.0	.0	.0	.0	.0	.0	37
12-13	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.6	.6	.0	.0	.0	.0	.0	.0	.0	.0	3
>13	.0	.0	.0	.0	.6	.0	.0	.6	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	10
INDET	2.8	.0	1.1	.0	.0	.0	.0	1.7	.6	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	12
TOTAL	5	8	31	25	22	22	15	21	13	1	12	2	2	0	0	0	0	0	0	0	179
PCT	2.8	4.5	17.3	14.0	12.3	12.3	8.4	11.7	7.3	.6	6.7	1.1	1.1	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1867-1977

AUGUST

AREA 0026 GULF OF PEILAS
47.15 76.3W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	21.1	4.8	9.5	.0	.0	.0	.0	35.4	20.4	1.4	8.2	.0	.0	.0	34.7
NE	23.6	.0	9.1	.0	.0	.0	.0	32.7	12.7	.0	.0	.0	.0	.0	54.5
E	11.8	.0	.0	.0	.0	.0	.0	11.8	11.8	.0	.0	.0	.0	.0	76.5
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
S	.0	.0	6.0	.0	.0	.0	.0	6.0	19.4	.0	.0	.0	.0	.0	74.9
SW	.0	.0	.0	.0	.0	.0	.0	.0	16.1	1.1	.0	.0	.0	.0	82.8
W	10.2	11.7	.0	.0	.0	.0	2.2	24.1	35.0	2.2	2.9	.0	.0	.0	35.8
NW	9.4	6.0	6.0	.0	.0	.0	3.4	24.8	10.1	1.3	.0	.0	.0	.0	63.8
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	30.0	.0	.0	.0	.0	.0	50.0
TOT PCT	10.4	4.4	4.4	.0	.0	.0	1.1	20.3	18.7	1.1	2.2	.0	.0	.0	57.7
TOT OBS:	182														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00003	10.2	4.1	.0	.0	.0	.0	.0	14.3	28.6	2.0	.0	.0	.0	.0	55.1
06009	11.1	2.2	4.4	.0	.0	.0	2.2	20.0	22.2	.0	.0	.0	.0	.0	57.8
12015	10.6	8.5	2.1	.0	.0	.0	.0	21.3	21.3	.0	2.1	.0	.0	.0	55.3
18021	8.5	2.1	10.6	.0	.0	.0	2.1	23.4	12.8	2.1	6.4	.0	.0	.0	55.3
TOT PCT	10.1	4.3	4.3	.0	.0	.0	1.1	19.7	21.3	1.1	2.1	.0	.0	.0	55.9
TOT OBS:	188														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.5	2.7	4.3	3.0	2.5	.9		13.8	22.7	13.5	.0	11.4	10.1	15.6	50.0	16.4	13.7	
NE	.3	1.6	1.8	.7	.7	*		5.1	17.3	5.1	.0	5.8	4.9	5.3	5.0	4.6	5.0	
E	.2	2.1	1.1	.2	.0	.0		3.7	10.0	4.7	.0	3.8	3.2	3.7	15.0	3.1	3.5	
SE	.5	7.4	2.1	.8	.3	.0		6.2	13.5	5.6	.0	6.1	5.1	7.4	.0	6.6	6.3	
S	.5	7.9	3.6	1.1	.4	.3		8.8	15.8	7.9	.0	8.5	10.1	10.1	.0	8.0	8.7	
SW	.5	3.1	5.9	4.4	2.1	.8		16.8	21.2	17.8	.0	15.1	19.0	17.9	.0	15.4	17.1	
W	.3	3.3	6.4	5.6	2.9	.6		19.1	22.3	17.8	66.7	20.8	22.2	17.2	20.0	20.0	16.2	
NW	.3	4.0	8.3	7.1	4.5	1.0		25.2	23.5	26.6	33.3	26.9	24.1	22.1	10.0	24.8	26.9	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	1.3							1.3	.0	.9	.0	1.5	1.2	.7	.0	1.2	2.6	
TOT OBS	112	562	850	585	342	91	2542		20.4	423	3	398	343	415	5	604	351	
TOT PCT	4.4	27.1	33.4	23.0	13.5	3.6		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+						00	03	09	15	21
N	1.6	3.6	3.6	3.5	1.6			13.8	22.7	13.4	10.8	16.0	15.4		
NE	1.1	1.7	1.3	.6	.4			5.1	17.3	5.1	5.4	5.3	4.7		
E	1.2	2.0	.5	.0	.0			3.7	10.0	4.7	3.5	3.8	3.2		
SE	1.6	2.5	1.7	.5	.0			6.2	13.5	5.5	5.6	7.3	6.5		
S	1.6	3.8	2.1	.9	.4			8.8	15.8	7.9	9.2	10.0	8.2		
SW	1.5	5.5	4.8	3.6	1.4			16.8	21.2	17.7	16.9	17.7	16.0		
W	1.5	4.7	6.8	4.4	1.8			19.1	22.3	18.2	21.5	17.2	18.6		
NW	1.5	5.9	8.4	6.5	2.9			25.2	23.5	26.6	25.6	22.0	25.5		
VAR	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0		
CALM	1.3							1.3	.0	.9	1.3	.7	1.7		
TOT OBS	328	755	738	508	213	2542			20.4	426	741	420	955		
TOT PCT	12.9	29.7	29.0	20.0	8.4			100.0		100.0	100.0	100.0	100.0		

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1867-1977

AUGUST

AREA 0026 GULF OF PEILAS
47.15 76.3W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOHR	CALM	1-3	4-10	11-21	22-33	34-47	48+	MEAN	PCT FREQ	TOTAL OBS
0000	.9	3.3	23.2	30.8	23.5	16.0	2.3	20.5	100.0	426
0600	1.3	2.7	22.3	34.3	23.1	12.7	3.6	20.2	100.0	741
1200	.7	3.3	23.1	36.4	21.0	12.1	3.3	19.7	100.0	420
1800	1.7	3.2	21.0	32.7	23.7	13.5	4.2	20.7	100.0	955
TOT	33	79	502	890	585	342	91	20.4		2542
PCT	1.3	3.1	22.1	33.4	23.0	13.5	3.6		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8-10	TOTAL OBS	MEAN CLOUD COVER
N	.7	.4	4.2	15.9		7.3
NE	1.8	.4	2.0	4.2		6.0
E	.5	.0	1.5	1.5		6.6
SE	3.1	1.5	2.2	.0		3.0
S	2.9	1.3	3.1	1.3		4.2
SW	.7	4.4	5.8	2.7		5.5
W	.7	6.2	6.6	5.1		5.5
NW	1.1	1.3	6.8	8.8		6.5
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	.7	.7		7.5
TOT OBS	16	21	45	55	137	5.9
TOT PCT	11.7	15.3	32.8	40.1	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NM) >4/8
AND OCCURRENCE OF NM <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
	149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
N	1.5	.0	1.6	6.2	5.5	1.8	1.5	.0	.0	.0	3.1	
NE	.0	.0	.2	1.5	1.8	2.6	.0	.0	.0	.0	2.4	
E	.0	.0	.0	.7	.7	1.5	.0	.0	.0	.0	.5	
SE	.0	.0	.0	.0	.7	.7	.0	.0	.0	.0	5.3	
S	.0	.0	.5	2.0	.7	.0	.0	.0	.0	.0	5.3	
SW	.0	.0	.9	2.7	2.4	.7	.0	.0	.0	.0	6.9	
W	1.3	.0	.7	2.6	3.1	1.8	.7	.0	.0	.0	8.4	
NW	.9	.0	1.8	1.8	7.7	1.8	.0	.0	.0	.0	3.8	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.0	
TOT OBS	5	0	8	24	33	15	3	0	0	0	49	137
TOT PCT	3.6	.0	5.8	17.5	24.1	10.9	2.2	.0	.0	.0	35.8	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NM) >4/8 AND VSBY (NM)

CEILING (FEET)	OR >10	OR >5	OR >2	VSBY (NM) OR >1	OR >1/2	OR >1/4	OR >50YD	OR >0
NH >6500	.0	.0	.0	.0	.0	.0	.0	.0
NH >5000	.0	.0	.0	.0	.0	.0	.0	.0
NH >3500	.0	1.4	1.4	2.1	2.1	2.1	2.1	2.1
NH >2000	6.4	11.3	12.1	12.8	12.8	12.8	12.8	12.8
NH >1000	17.0	32.6	37.6	38.3	38.3	38.3	38.3	38.3
NH >600	21.3	42.6	51.8	53.9	55.3	55.3	55.3	55.3
NH >300	23.4	46.1	57.4	59.6	61.0	61.0	61.0	61.0
NH >150	24.1	46.8	58.2	60.3	61.7	61.7	61.7	61.7
NH >0	24.1	47.5	60.3	63.8	65.2	65.2	65.2	65.2
TOTAL	34	67	85	90	92	92	92	92

TOTAL NUMBER OF OBS: 141

PCT FREQ NH <5/8: 34.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
	4.2	4.2	7.3	6.7	9.7	7.9	10.3	16.4	30.9	2.4	165

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1867-1977

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AREA 0026 GULF OF PEILAS
47.15 76.3W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF PRECIPITATION WITH VARYING VALUES OF VISIBILITY												
VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	PCP	.4	.0	.0	.0	.0	.0	.0	.1	.0	.0	.6
	NO PCP	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1
	TOT %	1.5	.0	.0	.0	.0	.0	.0	.1	.0	.0	1.7
1<2	PCP	1.1	.0	.0	.0	.0	.0	1.0	.1	.0	.0	2.2
	NO PCP	.0	.0	.0	.0	.0	.0	.6	.6	.0	.0	1.1
	TOT %	1.1	.0	.0	.0	.0	.0	1.6	.7	.0	.0	3.3
2<5	PCP	2.9	.6	.6	.0	.0	.0	.6	3.2	.0	.0	7.7
	NO PCP	2.6	.8	.0	.0	.0	.7	.7	1.8	.0	.0	6.6
	TOT %	5.5	1.4	.6	.0	.0	.7	1.2	5.0	.0	.0	14.4
5<10	PCP	1.5	1.7	.0	.0	.6	.0	2.1	.8	.0	.0	6.6
	NO PCP	4.0	1.1	.0	.6	2.1	1.7	6.4	6.4	.0	.0	22.1
	TOT %	5.5	2.8	.0	.6	2.6	1.7	8.4	7.2	.0	.0	28.7
10+	PCP	1.2	.3	.0	.0	.0	.0	.6	.7	.0	.0	2.8
	NO PCP	3.4	3.2	4.1	4.7	6.6	10.5	6.8	6.8	.0	1.1	49.2
	TOT %	6.6	3.5	4.1	4.7	6.6	10.5	7.3	7.5	.0	1.1	51.9
TOT OBS												181
TOT PCT		20.3	7.6	4.7	5.2	9.3	12.8	18.5	20.4	.0	1.1	100.0

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED WITH VARYING VALUES OF VISIBILITY												
VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	1.4	.0	.0	.0	.0	.0	.0	.8	.0	.0	2.2
	TOT %	1.4	.0	.0	.0	.0	.0	.0	.8	.0	.0	2.2
1<2	0-3	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.4
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.9	.0	.0	.0	.0	.0	.4	.4	.0	.0	1.8
	22+	.4	.0	.0	.0	.0	.0	.8	.6	.0	.0	1.8
	TOT %	1.3	.0	.0	.0	.0	.0	1.7	1.0	.0	.0	4.0
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.8	.1	.0	.0	.0	.0	.0	.0	.0	.0	.9
	11-21	.9	1.3	.4	.0	.0	.1	.6	1.5	.0	.0	4.9
	22+	3.4	1.0	.0	.0	.0	.4	.9	4.0	.0	.0	9.7
	TOT %	5.1	2.4	.4	.0	.0	.6	1.4	5.5	.0	.0	15.5
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.4	.0	1.7	.6	.3	.6	.0	.0	3.5
	11-21	2.1	2.0	.4	.9	1.3	.9	3.4	3.1	.0	.0	14.2
	22+	3.4	1.1	.0	.0	.0	.3	4.2	3.3	.0	.0	12.4
	TOT %	5.5	3.1	.9	.9	3.0	1.8	8.0	7.0	.0	.0	30.1
10+	0-3	.4	.4	.0	.4	.4	.0	.0	.0	.0	.9	2.7
	4-10	1.3	1.0	2.9	1.5	2.1	2.9	.8	1.2	.0	.0	13.7
	11-21	2.8	2.1	2.1	1.4	2.4	5.4	4.2	5.6	.0	.0	26.1
	22+	1.0	.6	.0	.4	.3	.1	1.3	2.0	.0	.0	5.8
	TOT %	5.5	4.1	5.0	3.9	5.3	8.4	6.3	8.8	.0	.9	48.2
TOT OBS												226
TOT PCT		18.9	9.6	6.3	4.8	8.3	10.7	17.4	23.1	.0	.9	100.0

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1867-1977

AUGUST

AREA 0026 GULF OF PEILAS
47.15 76.3W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <3/8 ANY HGT	TOTAL OBS
00003	2.7	.0	5.4	16.2	32.4	.0	.0	.0	.0	.0	56.8	43.2	37
06009	5.7	.0	.0	11.4	22.9	8.6	2.9	.0	.0	.0	51.4	48.6	35
12015	.0	.0	5.6	16.7	22.2	25.0	2.8	.0	.0	.0	72.2	27.8	36
18021	5.4	2.7	10.8	21.6	21.6	8.1	2.7	.0	.0	.0	73.0	27.0	37
TOT	5	1	8	24	36	15	3	0	0	0	92	53	145
PCT	3.4	.7	5.5	16.6	24.8	10.3	2.1	.0	.0	.0	63.4	36.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.0	12.3	38.6	49.1	57
06009	.0	.0	3.7	18.5	27.8	50.0	54
12015	.0	5.5	1.8	10.9	30.9	50.9	55
18021	.0	3.0	9.1	22.7	24.2	40.9	66
TOT	0	5	9	38	70	110	232
PCT	.0	2.2	3.9	16.4	30.2	47.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NM <3/8 AND 5+	TOTAL OBS
00003	2.9	8.6	23.7	34.3	40.0	35
06009	6.1	6.1	24.2	30.3	45.5	33
12015	.0	8.3	27.8	44.4	27.8	36
18021	5.4	21.6	51.4	21.6	27.0	37
TOT	5	16	46	46	49	141
PCT	3.5	11.3	32.6	32.6	34.8	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
55/59	.0	.0	.0	.0	.0	1.1	.5	.0	3	1.6
50/54	.0	.0	.0	.0	1.1	2.7	4.9	2.7	21	11.4
45/49	.0	.0	.0	.0	4.3	14.7	12.0	16.8	88	47.8
40/44	.0	.0	.0	.0	4.3	7.6	9.8	13.0	64	34.8
35/39	.0	.0	.0	.0	.0	.0	1.1	3.3	8	4.3
TOTAL	0	0	0	0	18	48	52	66	184	100.0
PCT	.0	.0	.0	.0	9.8	26.1	28.3	35.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.0	.4	.1	.5	.5	.0	.0
3.9	.7	.5	.0	.8	2.4	1.1	1.4	.0	.0	.5
10.9	1.4	2.2	1.6	4.8	4.8	9.2	12.5	.0	.5	.5
5.4	2.6	2.0	1.8	3.3	5.0	9.1	5.6	.0	.0	.0
.4	.0	.0	.0	.0	1.1	1.1	1.8	.0	.0	.0
20.7	4.6	4.8	3.4	9.2	13.5	21.1	21.7	.0	1.1	1.1

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	90%	5%	1%	MIN	MEAN	TOTAL OBS
00003	57	52	50	45	40	37	36	44.7	425
06009	54	51	50	44	39	37	36	44.3	745
12015	54	52	50	44	38	36	34	44.2	421
18021	60	54	51	45	40	37	33	45.2	918
TOT	60	52	50	45	39	37	33	44.7	2509

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	8.3	25.0	31.3	35.4	85	48
06009	.0	.0	9.1	36.4	15.9	38.6	84	44
12015	.0	.0	10.6	23.4	31.9	34.0	84	47
18021	.0	.0	9.8	27.5	29.4	33.3	83	51
TOT	0	0	18	53	52	67	84	190

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PERIOD: (PRIMARY) 1936-1977
(OVER-ALL) 1867-1977

TABLE 17

AREA 0026 GULF OF PEILAS
47.15 76.3WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	33 36	37 40	41 44	45 48	49 52	53 56	TOT	W FOG	WN FOG
11/13	.0	.0	.0	.0	.0	.6	1	.0	.6
9/10	.0	.0	.0	.0	.0	1.2	2	.6	.6
7/8	.0	.0	.6	.0	.0	.0	1	.0	.6
6	.0	.0	.0	.0	.0	1.8	3	.0	1.8
5	.0	.0	.0	.6	.0	.0	1	.0	.6
4	.0	.0	.0	.6	1.2	.0	3	.0	1.8
3	.0	.0	.0	1.2	.6	.6	4	.6	1.8
2	.0	.0	1.2	5.3	7.1	.6	24	.0	14.1
1	.0	.0	.0	1.8	5.3	.0	12	.0	7.1
0	.0	.0	1.2	5.3	3.5	.0	17	.6	9.4
-1	.0	.0	1.2	7.1	.6	.0	15	.6	8.2
-2	.0	.6	2.4	4.1	.0	.0	12	.0	7.1
-3	.0	.6	4.7	5.3	.0	.0	18	.0	10.6
-4	.0	.0	3.5	5.9	.0	.0	16	.0	9.4
-5	.0	1.2	6.5	2.9	.0	.0	18	.0	10.6
-6	.0	1.2	6.5	.6	.0	.0	14	.0	8.2
-7/-8	.6	1.2	1.8	.6	.6	.0	8	.0	4.7
-9/-10	.0	.6	.0	.0	.0	.0	1	.0	.6
TOTAL	1	9	50	70	32	8	170	4	166
PCT	.6	5.3	29.4	41.2	18.8	4.7	100.0	2.4	97.6

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	1.0	1.0	.0	.0	.0	2.1	.0	1.4	.0	.0	.0	.0	1.4
1-2	.0	2.7	.0	.0	.0	.0	2.7	1.4	.0	1.4	.0	.0	.0	2.7
3-4	.0	.0	1.4	.0	.0	.0	1.4	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	4.1	4.5	.0	.0	8.6	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	2.7	.0	1.0	.0	3.8	.0	.0	1.4	.0	.3	.0	1.7
8-9	.0	.0	.0	1.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	1.0	1.4	1.4	.0	3.8	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	1.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.0	1.4
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.0	1.4
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	3.8	10.3	7.9	2.4	.0	24.3	1.4	1.4	2.7	.0	3.1	.0	8.6

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	1.4	.0	.0	.0	.0	1.4	.0	.0	.0	.0	.0	.0	.0
1-2	.0	1.4	1.4	.0	.0	.0	2.7	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.7	1.4	.0	.0	.0	4.1	.0	.0	.0	.0	.0	.0	.0

PERIOD: (OVER-ALL) 1963-1977

AUGUST

AREA 0026 GULF OF PEILAS
47.15 76.3W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	1.4	.0	.0	.0	.0	.0	1.4	.0	1.4	.0	.0	.0	.0	1.4
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.0	.0	.0	1.4
3-4	.0	2.4	.0	.0	.0	.0	2.4	.0	.3	3.1	.0	.0	.0	3.4
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.7	.0	.0	.0	1.7
7	.0	1.4	2.1	.0	.0	.0	3.4	.0	.0	.7	.0	.0	.0	.7
8-9	.0	1.4	.0	.0	.0	.0	1.4	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	2.7	.0	.0	.0	2.7	.0	.3	1.7	.3	.0	.0	2.4
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.4	5.1	4.8	.0	.0	.0	11.3	.0	2.1	8.6	.7	.0	.0	11.3

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.3	.3	.0	.0	.0	.7	
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
3-4	.0	.0	5.4	1.0	.0	.0	6.5	.0	.0	6.5	.3	.0	.0	6.8	
5-6	.0	.0	1.0	.0	1.4	.0	2.4	.0	.0	1.4	1.0	.0	.0	2.4	
7	.0	.0	.0	.0	.0	.0	.0	.0	1.4	4.1	.0	.0	.0	5.5	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	
10-11	.0	1.0	2.1	1.0	.0	.0	4.1	.0	.0	2.1	.0	.0	.0	2.1	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	3.1	.0	.0	3.1	.0	.0	.0	2.4	1.4	.0	3.8	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.0	1.4	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	1.0	8.6	5.1	1.4	.0	16.1	.0	1.7	14.4	4.1	2.7	.0	22.9	98.6

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	2.7	6.8	1.4	.0	.0	.0	10.8	
1-2	1.4	4.1	4.1	.0	.0	.0	9.5	
3-4	.0	2.7	16.2	1.4	.0	.0	20.3	
5-6	.0	.0	8.1	5.4	1.4	.0	14.9	
7	.0	2.7	10.8	.0	1.4	.0	14.9	
8-9	.0	1.4	.0	1.4	.0	.0	2.7	
10-11	.0	1.4	9.5	2.7	1.4	.0	14.9	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	6.8	1.4	.0	8.1	
20-22	.0	.0	.0	.0	1.4	.0	1.4	
23-25	.0	.0	.0	.0	2.7	.0	2.7	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	4.1	16.9	50.0	17.6	9.5	.0	100.0	74

PERIOD: (OVER-ALL) 1953-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.7	5.2	5.2	5.2	2.6	2.6	.9	.0	.9	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	29	5
6-7	.0	.0	3.5	6.1	7.8	2.6	.9	.0	2.6	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	28	7
8-9	.0	.0	1.7	.9	6.1	.9	5.2	1.7	3.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	23	9
10-11	.0	.0	.0	.9	3.5	1.7	.9	.9	3.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	10
12-13	.0	.0	.0	.0	.0	.0	.9	.0	2.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	12
>13	.0	.0	.0	1.7	.0	.9	.0	.0	.9	1.7	.9	.0	.0	.9	.0	.0	.0	.0	.0	8	15
INDET	3.5	.0	2.6	.0	.0	.9	.0	.0	.0	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	10	5
TOTAL	6	6	15	17	23	11	10	3	16	5	2	0	0	1	0	0	0	0	0	115	8
PCT	5.2	5.2	13.0	14.8	20.0	9.6	8.7	2.6	13.9	4.3	1.7	.0	.0	.9	.0	.0	.0	.0	.0	100.0	

SEPTEMBER

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1862-1977AREA 0026 GULF OF PEILAS
47.25 76.5W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGD W0 PCPN	FGD W0 PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	17.8	2.1	12.8	.0	2.1	.0	.0	27.7	17.6	.0	.0	.0	.0	.0	54.8
NE	8.3	.0	5.6	.0	.0	.0	.0	13.9	44.4	.0	11.1	.0	.0	.0	30.6
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	8.7	.0	.0	.0	.0	.0	.0	8.7	.0	.0	8.7	.0	.0	.0	82.6
S	8.5	.0	4.3	.0	.0	.0	.0	12.8	.0	.0	4.3	.0	.0	.0	83.0
SW	.0	2.4	5.4	.0	.0	.0	.0	10.8	1.4	.0	.0	.0	.0	.0	87.8
W	6.3	.0	2.1	.0	.0	.0	.0	8.5	10.6	.0	.0	.0	.0	.0	81.0
NW	9.0	3.0	5.6	.0	.0	.0	.0	17.5	13.1	.0	3.0	.0	3.0	.0	63.4
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	8.3	1.8	6.0	.0	.5	.0	.0	16.1	11.5	.0	2.3	.0	.9	.0	69.1
TOT OBS:	217														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA								
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG BLWG	DUST SNOW	NO SIG WEA
00603	7.3	.0	7.3	.0	1.8	.0	.0	14.5	10.9	.0	.0	.0	1.8	.0	.0	72.7
06009	8.2	1.6	8.2	.0	.0	.0	.0	18.0	11.5	.0	1.6	.0	.0	.0	.0	68.9
12015	11.8	3.9	5.9	.0	.0	.0	.0	21.6	11.8	.0	2.0	.0	.0	.0	.0	64.7
18021	6.0	3.0	1.5	.0	.0	.0	.0	10.4	9.0	.0	6.0	.0	1.5	.0	.0	73.1
TOT PCT TOT OBS:	8.1 234	2.1	5.6	.0	.4	.0	.0	15.8	10.7	.0	2.6	.0	.9	.0	.0	70.1

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	0-3	WIND SPEED (KNOTS)					48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
		4-10	11-21	22-33	34-47	00					03	06	09	12	15	18	21
N	.6	2.5	3.4	3.0	1.6	.6		11.8	21.0	11.4	.0	9.6	10.8	12.5	4.5	14.4	10.3
NE	.3	1.5	1.0	.4	.2	.1		3.6	14.2	3.0	.0	4.4	2.6	4.5	.0	3.9	3.1
E	.1	1.4	.5	.1	.0	.0		2.1	9.7	2.3	.0	1.3	3.4	1.8	.0	2.1	2.1
SE	.2	2.3	2.4	.6	.2	.0		5.7	13.1	5.9	.0	5.3	5.4	6.6	.0	5.3	6.5
S	.5	3.7	3.3	1.0	.4	.0		8.9	13.5	9.2	.0	10.0	7.9	11.0	6.8	7.3	8.6
SW	.7	4.1	6.5	3.3	.9	.2		15.7	16.9	14.9	.0	15.4	16.7	17.1	29.5	13.3	18.1
W	.5	4.2	8.7	7.3	2.1	.2		22.9	20.0	23.3	.0	24.1	24.6	20.4	15.9	21.9	24.5
NW	.5	5.2	9.9	7.9	3.2	.8		27.4	20.8	28.6	100.0	28.1	26.6	24.0	43.2	29.3	25.5
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.9							1.9	.0	1.4	.0	1.8	2.0	2.0	.0	2.5	1.3
TOT OBS	116	553	793	524	190	40	2216	18.1		350	2	362	302	344	11	555	310
TOT PCT	5.2	25.0	35.8	23.6	8.6	1.8		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)							41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	41+	41+					00	03	06	12	18
N	1.7	2.9	3.7	2.3	1.1			11.8	21.0	11.4	10.2	12.3	12.9			
NE	.9	1.4	.8	.4	.1			3.6	14.2	3.0	3.6	4.4	3.6			
E	.7	1.2	.2	.0	.0			2.1	9.7	2.3	2.3	1.8	2.1			
SE	1.3	2.5	1.7	.2	.0			5.7	13.1	5.8	5.3	6.4	5.7			
S	1.6	4.5	2.2	.4	.2			8.9	13.5	9.2	9.0	10.9	7.8			
SW	2.1	5.9	5.2	2.0	.5			15.7	16.9	14.8	16.0	17.5	15.0			
W	1.5	6.5	4.7	4.5	.8			22.9	20.0	23.2	24.3	20.3	22.9			
NW	2.1	8.5	9.2	5.8	1.9			27.4	20.8	29.0	27.4	24.6	27.9			
VAR	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0			
CALM	1.9							1.9	.0	1.4	1.9	2.0	2.1			
TOT OBS	303	742	726	346	99	2216		18.1		352	644	355	865			
TOT PCT	13.7	33.5	32.8	15.6	4.5			100.0		100.0	100.0	100.0	100.0			

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1862-1977

SEPTEMBER

AREA 0026 GULF OF PEILAS
47.2S 76.5W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)						MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47	48+			
0000Z	1.4	4.3	23.6	35.8	25.0	8.2	1.7	18.2	100.0	352
0600Z	1.9	3.9	23.6	39.1	22.4	7.6	1.6	17.6	100.0	644
1200Z	2.0	4.8	27.0	35.2	20.0	8.7	2.3	17.4	100.0	355
1800Z	2.1	2.0	25.7	33.5	25.5	9.4	1.8	18.7	100.0	865
TOT	42	74	553	743	524	190	40	18.1		2216
PCT	1.9	3.3	25.0	35.8	23.6	8.6	1.8	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	1.9	1.2	2.6	17.2		6.8
NE	.0	.0	.2	4.4		7.8
E	.0	.0	.0	.0		.0
SE	.6	.0	.0	1.2		6.0
S	1.6	2.3	1.7	2.3		4.7
SW	1.6	1.4	4.0	1.7		4.9
W	.6	3.4	8.1	5.7		6.2
NW	1.2	2.2	8.9	21.4		7.0
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	1.9	.6		6.2
TOT OBS	12	17	44	88	161	6.4
TOT PCT	7.5	10.6	27.3	54.7	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NM >4/8)
AND OCCURRENCE OF NM <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.6	2.6	6.8	6.8	1.7	.6	.6	.0	.0	3.1	
NE	.0	.0	.2	2.6	1.2	.5	.0	.0	.0	.0	.0	
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
SE	.0	.0	.0	.0	1.2	.0	.0	.0	.0	.0	.6	
S	.0	.0	1.2	.5	.6	.6	.5	.0	.0	.0	4.5	
SW	.0	.0	.2	.8	2.0	.6	.2	.6	.6	.0	3.7	
W	.0	.0	.9	4.0	3.7	.0	.6	.0	.0	.0	8.5	
NW	.6	3.1	4.8	9.5	4.2	2.2	.6	.0	.6	.0	8.1	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.6	.6	.6	.0	.0	.0	.0	.0	.6	
TOT OBS	1	6	17	40	33	9	4	2	2	0	47	161
TOT PCT	.6	3.7	10.6	24.8	20.5	5.6	2.5	1.2	1.2	.0	29.2	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NM >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>30YD	>0
>6500	.0	.0	.0	.6	.6	.6	.6	.6
>5000	.6	1.2	1.2	1.8	1.8	1.8	1.8	1.8
>3500	1.8	3.0	3.0	3.6	3.6	3.6	3.6	3.6
>2000	6.0	7.7	8.3	8.9	8.9	9.5	9.5	9.5
>1000	16.7	26.2	30.4	31.0	31.0	31.5	31.5	31.5
>500	27.4	46.4	54.8	55.4	55.4	56.0	56.0	56.0
>300	29.2	55.4	64.9	65.5	65.5	66.1	66.1	66.1
>150	29.2	57.1	68.5	69.0	69.0	69.6	69.6	69.6
>0	29.2	57.1	69.0	69.6	69.6	70.2	70.2	70.2
TOTAL	49	96	116	117	117	118	118	118

TOTAL NUMBER OF OBS: 161

PCT FREQ NH <5/8: 29.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
4.7	3.1	3.1	10.4	8.3	9.9	12.0	10.9	37.5	.0	192

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1802-1977

SEPTEMBER

AREA 0026 GULF OF PEILAS
47.25 76.5W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.5	.5	.0	.0	.0	.0	.0	.9	
	TOT %	.0	.0	.0	.5	.5	.0	.0	.0	.0	.0	.9	
1<2	PCP	.0	.0	.0	.0	.0	.0	.3	.1	.0	.0	.5	
	NO PCP	.0	.0	.0	.0	.0	.0	.5	.5	.0	.0	.5	
	TOT %	.0	.0	.0	.0	.0	.0	.3	.6	.0	.0	.9	
2<5	PCP	2.2	.1	.0	.0	.5	.5	.0	1.9	.0	.0	5.1	
	NO PCP	.3	1.4	.0	.0	.9	.0	.8	4.0	.0	.0	7.4	
	TOT %	2.6	1.5	.0	.0	1.4	.5	.8	5.8	.0	.0	12.6	
5<10	PCP	2.9	.2	.0	.5	.9	.0	1.0	2.3	.0	.0	7.9	
	NO PCP	5.5	.9	.0	1.6	2.1	1.0	8.0	10.1	.0	.5	29.8	
	TOT %	8.4	1.2	.0	2.1	3.0	1.0	9.1	12.4	.0	.5	37.7	
10+	PCP	.9	.2	.0	.0	.0	.5	.0	1.2	.0	.0	2.8	
	NO PCP	9.5	1.3	.5	2.8	6.0	6.2	6.3	10.7	.0	1.4	44.7	
	TOT %	10.5	1.5	.5	2.8	6.0	6.6	6.3	11.9	.0	1.4	47.4	
TOT OBS													215
TOT PCT		21.4	4.2	.5	5.3	10.9	8.1	16.5	31.2	.0	1.9	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.4	.4	.0	.0	.0	.0	.0	.9	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
	TOT %	.0	.0	.0	.4	.4	.0	.0	.4	.0	.0	1.3	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.4	
	11-21	.0	.0	.0	.0	.0	.0	.3	.1	.0	.0	.4	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.3	.5	.0	.0	.9	
2<5	0-3	.0	.4	.0	.0	.0	.0	.4	.0	.0	.0	.9	
	4-10	.8	.9	.0	.0	.9	.0	.3	1.1	.0	.0	3.9	
	11-21	.4	.0	.0	.0	.0	.0	.0	1.7	.0	.0	2.2	
	22+	1.2	.1	.0	.0	.4	.4	.0	2.6	.0	.0	4.8	
	TOT %	2.4	1.4	.0	.0	1.3	.4	.8	5.5	.0	.0	11.8	
5<10	0-3	.4	.0	.0	.0	.0	.4	.0	.0	.0	.4	1.3	
	4-10	1.2	.4	.0	.7	2.0	.0	1.2	2.4	.0	.0	7.9	
	11-21	2.8	.5	.0	.9	.9	.0	3.7	3.4	.0	.0	12.2	
	22+	3.8	.1	.0	.4	.0	.8	4.7	5.9	.0	.0	15.7	
	TOT %	8.3	1.1	.0	2.0	2.8	1.2	9.6	11.7	.0	.4	37.1	
10+	0-3	.7	.2	.0	.0	.8	.5	.4	.4	.0	1.3	4.4	
	4-10	3.8	.5	.0	1.3	2.5	3.7	1.7	2.9	.0	.0	16.6	
	11-21	1.9	.4	.0	1.3	1.9	3.1	2.7	5.8	.0	.0	17.5	
	22+	3.5	.2	.0	.4	1.2	1.1	1.2	2.4	.0	.0	10.0	
	TOT %	9.8	1.4	.4	3.1	6.3	8.4	6.1	11.6	.0	1.3	48.5	
TOT OBS													229
TOT PCT		20.5	3.9	.4	5.5	10.9	10.0	16.8	30.1	.0	1.7	100.0	

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1862-1977

SEPTEMBER

AREA 0026 GULF OF PEILAS
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	.0	2.3	7.0	23.3	9.3	9.3	4.7	.0	2.3	.0	58.1	41.9	43
06009	2.4	2.4	4.8	26.2	26.2	4.8	.0	2.4	.0	.0	69.0	31.0	42
12015	.0	.0	20.5	20.5	17.9	7.7	.0	.0	2.6	.0	69.2	30.8	39
18021	.0	7.5	7.5	22.6	28.3	1.9	3.8	1.9	.0	.0	73.6	26.4	53
TOT	1	6	17	41	37	10	4	2	2	0	120	57	177
PCT	.6	3.4	9.6	23.2	20.9	5.6	2.3	1.1	1.1	.0	67.8	32.2	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	1.8	1.8	12.5	33.9	50.0	56
06009	.0	.0	.0	12.3	44.6	43.1	65
12015	1.9	1.9	1.9	18.5	31.5	44.4	54
18021	.0	2.8	1.4	11.3	33.8	50.7	71
TOT	1	4	3	33	89	116	246
PCT	.4	1.6	1.2	13.4	36.2	47.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOUR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	.0	10.3	38.5	20.5	41.0	39
06009	2.4	9.8	41.5	31.7	26.8	41
12015	.0	23.7	57.1	20.0	22.9	35
18021	.0	15.1	43.4	30.2	26.4	53
TOT	1	25	75	44	49	168
PCT	.6	14.9	44.6	26.2	29.2	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
55/59	.0	.0	.0	.0	.8	3.0	.8	.0	12	4.5
50/54	.0	.0	.8	.8	.8	3.4	4.2	2.6	33	12.5
45/49	.0	.0	.8	3.0	8.7	17.0	20.0	9.4	156	58.9
40/44	.0	.0	.0	.4	6.4	4.2	3.4	4.9	51	19.2
35/39	.0	.0	.0	.0	.0	1.1	.4	2.6	11	4.2
30/34	.0	.0	.0	.0	.0	.0	.8	.0	2	.8
TOTAL	0	0	4	11	44	76	78	52	265	100.0
PCT	.0	.0	1.5	4.2	16.6	28.7	29.4	19.6		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
1.0	.0	.0	.0	.0	.4	.4	2.7	.0	.0	.0
2.5	.8	.0	.4	1.7	1.4	.6	4.8	.0	.4	.0
11.8	2.9	.8	4.5	5.7	6.9	10.3	16.0	.0	.0	.0
2.5	.4	.0	1.5	2.9	1.8	3.2	5.8	.0	1.1	.0
1.1	.2	.0	.4	1.4	.1	.0	.1	.0	.8	.0
.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19.6	4.3	.8	6.8	11.7	10.6	14.4	29.5	.0	2.3	.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	63	55	50	45	40	37	34	45.3	356
06009	58	52	50	45	39	36	32	44.6	649
12015	59	53	50	45	39	37	35	45.1	353
18021	59	54	52	46	41	39	37	46.2	814
TOT	63	54	51	45	40	37	32	45.4	2172

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	15.4	33.8	30.8	20.0	80	65
06009	.0	6.3	16.3	22.5	23.8	31.3	80	80
12015	.0	5.0	8.3	33.3	26.7	26.7	81	60
18021	.0	10.6	21.2	24.7	30.6	12.9	75	85
TOT	0	17	46	81	81	65	79	290

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1862-1977

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TEMP DIF	37 40	41 44	45 48	49 52	53 56	57 60	TOT	N FOG	NO FOG
11/13	.0	.0	.0	.0	1.0	2.0	6	.5	2.6
9/10	.0	.0	.0	.5	1.0	.0	3	.0	1.5
7/8	.0	.0	.0	.5	1.5	.0	4	.0	2.0
6	.0	.0	.5	.5	1.5	.5	6	.0	3.1
5	.0	.0	.5	2.0	.5	.0	6	.0	3.1
4	.0	.0	.5	1.5	.5	.0	5	.0	2.6
3	.0	.0	2.0	3.1	.0	.0	10	.0	5.1
2	.0	.5	1.5	3.6	.0	.0	11	.0	5.6
1	.0	.0	2.6	3.6	.0	.0	12	.5	5.6
0	.5	.0	9.7	3.1	.0	.0	26	.0	13.3
-1	.0	2.0	4.1	3.1	.0	.0	18	.0	9.2
-2	.0	.5	0.6	1.0	.0	.0	16	.0	8.2
-3	.0	1.5	5.6	1.0	.0	.0	16	.0	8.2
-4	.0	3.1	4.1	.0	.0	.0	14	.0	7.1
-5	.5	3.1	5.1	.0	.0	.0	17	.0	8.7
-6	1.5	3.1	3.6	.0	.0	.0	16	.5	7.7
-7/-8	1.0	1.5	.5	.0	.0	.0	6	.0	3.1
-9/-10	.5	.0	.5	.0	.0	.0	2	.0	1.0
-11/-13	.5	.5	.0	.0	.0	.0	2	.0	1.0
TOTAL	9		93		12		196	3	193
PCT	4.6	15.8	47.4	23.5	6.1	2.6	100.0	1.5	98.5

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	1.2	.0	.0	.0	.0	2.0	.0	.0	1.2	.0	.0	.0	1.2
1-2	.0	2.0	2.0	.0	.0	.0	4.1	.0	3.8	.0	.0	.0	.0	3.8
3-4	.0	1.2	2.0	.0	.0	.0	3.2	.0	1.2	.3	.0	.0	.0	1.5
5-6	.0	.9	4.7	.9	.0	.0	6.4	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	2.0	.0	.0	2.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	5.2	9.6	2.9	.0	.0	17.7	.0	4.9	1.5	.0	.0	.0	6.4

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	.0	.0	1.2
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	.0	1.2
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	1.2	.0	.0	2.3

PERIOD: (OVER-ALL) 1963-1977

SEPTEMBER

AREA 0026 GULF OF PEILAS
47.25 76.5W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	1.2	1.2	.0	.0	.0	.0	.0	2.3
1-2	.0	1.2	.0	.0	.0	.0	1.2	.0	2.3	.0	.0	.0	.0	.0	2.3
3-4	.0	1.2	.0	.0	.0	.0	1.2	.0	.0	.3	.0	.0	.0	.0	.3
5-6	.0	.0	.0	.0	.0	.0	1.7	.0	.0	.3	.3	.0	.0	.0	.6
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	.0	1.2	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.3	.0	1.5	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	1.2	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.3	.9	.9	1.2	.0	5.2	1.2	3.3	.6	2.6	.3	.0	8.1	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT	
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3	
1-2	1.2	.0	.9	.0	.0	.0	2.0	.0	2.3	2.9	.0	.0	.0	.0	5.2	
3-4	.0	.9	2.0	1.2	.0	.0	4.1	.0	3.8	3.5	.0	.0	.0	.0	7.3	
5-6	.0	3.8	6.4	.0	.0	.0	10.2	.0	2.3	2.9	2.6	.0	.0	.0	7.8	
7	.0	1.2	.0	.0	.0	.0	1.2	.0	.0	4.7	1.5	.0	.0	.0	6.1	
8-9	.0	.0	.0	1.2	.0	.0	1.2	.0	.0	.0	5.8	.0	.0	.0	5.8	
10-11	.0	.0	.0	.0	.9	.0	.9	.0	.0	.0	2.3	.0	.0	.0	2.3	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.3	.0	.0	.0	2.3	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	1.2	5.8	9.3	2.3	.9	.0	19.5	.0	8.4	14.2	14.5	.0	.0	37.2	96.5	

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	4.7	2.3	2.3	.0	.0	.0	9.3	
1-2	1.2	11.6	7.0	.0	.0	.0	19.8	
3-4	.0	8.1	8.1	1.2	.0	.0	17.4	
5-6	.0	7.0	15.1	4.7	.0	.0	26.7	
7	.0	1.2	4.7	.0	.0	.0	10.5	
8-9	.0	.0	.0	8.1	.0	.0	8.1	
10-11	.0	.0	.0	3.5	1.2	.0	4.7	
12	.0	.0	.0	2.3	.0	.0	2.3	
13-16	.0	.0	.0	.0	1.2	.0	1.2	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	5.8	30.2	37.2	24.4	2.3	.0	100.0	86

PERIOD: (OVER-ALL) 1951-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
46	2.8	6.3	2.8	1.4	2.8	.7	.0	2.1	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	28	4
6-7	.0	.0	.0	5.6	1.4	4.9	2.1	1.4	4.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	29	9
8-9	.0	.7	.0	2.1	6.9	4.2	2.8	1.4	.7	2.8	2.1	.0	.0	.0	.0	.0	.0	.0	.0	34	10
10-11	.0	.0	2.1	2.1	4.2	2.1	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	17	7
12-13	.0	.0	.0	.0	.0	.7	1.4	2.8	2.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	13
15-19	.0	.0	.0	.0	.0	.0	1.4	.0	2.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	12
INDET	6.3	.0	.7	1.4	.7	.0	2.8	.0	.7	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	19	5
TOTAL	13	10	8	18	23	18	16	11	17	6	3	0	0	1	0	0	0	0	0	144	8
PCT	9.0	6.9	5.6	12.5	16.0	12.5	11.1	7.6	11.8	4.2	2.1	.0	.0	.7	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1905-1977
(OVER-ALL) 1870-1977

OCTOBER

AREA 0026 GULF OF PEILAS
47.05 76.4W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA						
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHR FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA	
N	24.1	5.7	10.4	.0	.0	.0	.0	40.1	10.8	.0	3.3	1.9	.0	.0	43.9	
NE	43.8	.0	6.3	.0	.0	.0	.0	50.0	.0	.0	.0	.0	.0	.0	50.0	
E	18.2	18.2	.0	.0	.0	.0	.0	36.4	18.2	.0	.0	.0	.0	.0	45.5	
SE	10.8	.0	.0	.0	.0	.0	.0	10.8	.0	.0	.0	.0	.0	.0	89.2	
S	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.6	.0	96.4	
SW	5.2	2.6	5.2	.0	.0	.0	.0	13.0	7.1	.0	2.6	.0	.6	.0	76.6	
W	4.3	.0	3.4	.0	.0	.0	.0	7.7	13.9	.0	5.6	.0	.0	.0	70.8	
NW	12.0	3.4	2.1	.0	.0	.0	.0	17.5	3.6	.0	13.7	.0	.0	.0	63.2	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	20.0	.0	.0	.0	.0	.0	.0	20.0	.0	.0	.0	.0	.0	.0	80.0	
TOT PCT	11.5	2.8	4.3	.0	.0	.0	.0	18.6	8.7	.0	5.5	.4	.4	.0	66.4	
TOT OBS:	253															

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE								OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA	
00603	11.3	2.8	5.6	.0	.0	.0	.0	19.7	2.8	.0	7.0	1.4	.0	.0	69.0	
06609	9.2	3.1	6.2	.0	.0	.0	.0	18.5	4.6	.0	4.6	.0	.0	.0	72.3	
12615	15.9	3.2	4.8	.0	.0	.0	.0	22.2	11.1	.0	3.2	.0	1.6	.0	61.9	
18621	11.7	1.7	3.3	.0	.0	.0	.0	16.7	18.3	.0	6.7	.0	.0	.0	58.3	
TOT TQT OBS:	12.0 259	2.7	5.0	.0	.0	.0	.0	19.3	8.9	.0	5.4	.4	.4	.0	65.6	

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.6	2.8	5.0	3.2	1.5	.4		13.5	19.6		14.7	33.3	14.3	12.6	12.3	20.0	13.6	12.7
NE	.3	1.1	.7	.7	.1	.0		2.9	12.8		2.7	.0	2.3	2.9	3.4	.0	3.2	2.8
E	.3	1.6	.2	.1	.0	.0		1.1	8.0		1.0	.0	1.9	.6	1.3	.0	1.0	.5
SE	.5	1.6	1.0	.3	.0	.0		3.4	10.3		2.4	.0	3.9	4.7	4.1	.0	2.7	3.3
S	.9	4.0	4.0	1.6	.3	.0		10.8	12.8		11.6	8.3	11.4	11.2	12.4	.0	9.3	10.0
SW	.6	6.9	8.9	3.8	1.0	.2		18.6	15.8		18.3	8.3	20.9	20.2	20.0	17.3	20.7	
W	.7	5.3	8.2	5.6	1.7	.4		21.8	18.3		20.3	25.0	22.8	21.0	23.4	10.0	22.9	19.6
NW	1.0	6.3	10.0	5.8	2.9	.5		26.4	18.8		27.4	25.0	26.2	24.3	21.7	50.0	28.3	29.1
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.5							1.5	.0		1.6	.0	1.7	1.9	1.1	.0	1.6	1.3
TOT OBS	155	678	830	498	177	35	2373		16.8		380	6	360	315	368	5	623	316
TOT PCT	6.5	28.6	35.0	21.0	7.5	1.5		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40					00	06	12	18	21
N	1.9	3.9	4.7	2.1	1.0		13.5	19.6	15.0	13.5	12.4	13.3	
NE	.9	1.0	.7	.3	.0		2.9	12.8	2.7	2.6	3.4	3.0	
E	.6	.3	.1	.0	.0		1.1	8.0	1.0	1.3	1.3	.9	
SE	1.2	1.4	.7	.1	.0		3.4	10.3	2.4	4.3	4.0	2.9	
S	3.0	4.7	2.4	.6	.1		10.8	12.8	11.6	11.3	12.3	9.6	
SW	3.5	7.6	4.7	2.3	.4		18.6	15.8	18.1	18.0	20.2	18.5	
W	2.5	8.0	7.1	3.4	.7		21.8	18.3	20.4	22.0	23.3	21.8	
NW	2.4	8.6	8.4	4.5	1.5		26.4	18.8	27.3	25.3	22.1	28.6	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	1.5						1.5	.0	1.6	1.8	1.1	1.5	
TOT OBS	441	843	684	316	89	2373		16.8	386	673	373	939	
TOT PCT	18.6	35.5	28.8	13.3	3.8		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1905-1977
(OVER-ALL) 1870-1977

OCTOBER

AREA 0026 GULF OF PEILAS
47.05 76.4M

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47					
0000Z	1.6	6.0	29.0	33.9	19.4	7.8	2.3	16.8	100.0		386
0600Z	1.8	3.7	30.2	36.7	18.4	8.1	1.0	16.6	100.0		675
1200Z	1.1	4.8	31.4	34.3	21.7	5.6	1.1	16.0	100.0		373
1800Z	1.5	5.6	26.1	34.4	23.2	7.6	1.6	17.2	100.0		939
TOT	36	119	678	820	498	177	39	16.8			2373
PCT	1.5	5.0	28.6	35.0	21.0	7.5	1.5	100.0			

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 9	TOTAL	MEAN CLOUD COVER
N	.8	1.0	2.6	16.5		7.3
NE	.0	.5	.0	1.4		7.0
E	.4	.8	.0	1.4		5.7
SE	1.2	1.1	.6	1.4		4.7
S	1.7	1.0	3.3	3.3		5.4
SW	1.7	1.4	5.6	6.9		6.1
W	1.8	2.3	6.7	12.3		6.5
NW	1.1	1.1	2.6	15.0		7.1
VAR	.0	.0	.0	.0		.0
CALM	.0	1.0	.5	1.0		5.8
TOT OBS	18	21	46	124	209	6.5
TOT PCT	8.6	10.0	22.0	59.3	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
	149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
N	1.4	.0	1.7	3.5	4.8	5.1	1.0	.0	.0	.0	3.5	
NE	.0	.0	.0	.6	.1	.7	.0	.0	.0	.0	.5	
E	.0	.0	.0	.0	.5	.5	.0	.0	.0	.0	1.2	
SE	.5	.0	.0	.0	1.1	.0	.0	.0	.0	.0	2.8	
S	.0	.0	.0	1.8	1.8	1.2	.5	.5	.0	.0	3.6	
SW	.0	.1	.5	2.4	3.6	3.0	1.8	.0	.0	.0	4.3	
W	.4	.4	1.3	2.8	6.9	3.2	.6	.0	.0	.0	7.5	
NW	.6	.5	1.8	4.8	3.7	3.9	.5	.0	.0	.0	3.9	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.5	.5	.5	.0	.0	.0	.0	1.0	
TOT OBS	6	2	11	34	48	38	10	1	0	0	59	209
TOT PCT	2.9	1.0	5.3	16.3	23.0	18.2	4.8	.5	.0	.0	28.2	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= NH >6500	.0	.0	.0	.0	.0	.0	.0	.0
= NH >5000	.0	.5	.5	.5	.5	.5	.5	.5
= NH >3500	2.4	3.8	4.8	5.2	5.2	5.2	5.2	5.2
= NH >2000	8.1	20.0	22.4	22.9	22.9	22.9	22.9	22.9
= NH >1000	17.6	39.0	44.8	45.2	46.2	46.2	46.2	46.2
= NH >600	23.8	50.0	59.5	61.4	62.4	62.4	62.4	62.4
= NH >300	27.6	55.2	65.2	67.1	68.1	68.1	68.1	68.1
= NH >150	28.1	55.7	65.7	68.1	69.0	69.0	69.0	69.0
= NH >0	28.1	57.1	68.1	71.4	72.4	72.4	72.4	72.4
TOTAL	59	120	143	150	152	152	152	152

TOTAL NUMBER OF OBS: 210

PCT FREQ NH <5/8: 27.6

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	9	TOTAL
											OBS
	5.4	4.1	4.1	6.8	7.7	4.5	8.6	8.1	48.9	1.8	221

OCTOBER

PERIOD: (PRIMARY) 1905-1977
(OVER-ALL) 1870-1977

TABLE 8

AREA 0026 GULF OF PEILAS
47.0S 76.4WPERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.4	.0	.0	.0	.4	.0	.0	.0	.8	
	NO PCP	.0	.0	.0	.0	.0	.0	.4	.4	.0	.0	.8	
	TOT %	.0	.0	.4	.0	.0	.0	.8	.4	.0	.0	1.6	
1/2<1	PCP	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	
	NO PCP	.3	.0	.0	.0	.0	.0	.6	1.9	.0	.0	2.8	
	TOT %	.7	.0	.0	.0	.0	.0	.6	1.9	.0	.0	3.2	
1<2	PCP	1.2	.0	.0	.0	.0	.0	.4	.0	.0	.0	1.6	
	NO PCP	.3	.0	.0	.0	.0	.0	.9	.0	.0	.0	1.2	
	TOT %	1.5	.0	.0	.0	.0	.0	1.3	.0	.0	.0	2.8	
2<5	PCP	3.5	.6	.0	.0	.0	.0	.7	.0	.4	.4	5.2	
	NO PCP	.8	.0	.0	.5	.3	.5	1.0	1.7	.0	.0	4.8	
	TOT %	4.3	.6	.0	.5	.3	.5	1.0	2.4	.0	.4	10.0	
5<10	PCP	2.3	.2	.4	.4	.0	2.0	1.2	2.3	.0	.0	8.8	
	NO PCP	6.8	.4	.7	.2	3.5	5.1	5.3	6.8	.0	.0	28.9	
	TOT %	9.1	.6	1.1	.6	3.5	7.1	6.5	9.1	.0	.0	37.8	
10+	PCP	1.1	.0	.0	.0	.0	.0	.2	.7	.0	.0	2.0	
	NO PCP	4.5	.4	.7	2.6	4.3	7.7	14.3	7.6	.0	.4	42.6	
	TOT %	5.6	.4	.7	2.6	4.3	7.7	14.5	8.3	.0	.4	44.6	
TOT OBS													249
TOT PCT		21.3	1.6	2.2	3.7	8.1	15.4	23.4	23.5	.0	.8	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.4	.0	.0	.0	.6	.2	.0	.0	1.2	
	11-21	.0	.0	.0	.0	.0	.0	.4	.4	.0	.0	.8	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.4	.0	.0	.0	1.0	.6	.0	.0	1.9	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.4	1.5	.0	.0	1.9	
	11-21	.0	.0	.0	.0	.0	.0	.2	.2	.0	.0	.4	
	22+	.7	.0	.0	.0	.0	.0	.0	.1	.0	.0	.8	
	TOT %	.7	.0	.0	.0	.0	.0	.6	1.8	.0	.0	3.1	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.4	.8	.0	.0	1.2	
	11-21	1.1	.0	.0	.0	.0	.0	.0	.1	.0	.0	1.2	
	22+	.4	.0	.0	.0	.0	.0	.0	.8	.0	.0	1.2	
	TOT %	1.4	.0	.0	.0	.0	.0	.4	1.6	.0	.0	3.5	
2<5	0-3	.0	.0	.0	.0	.0	.1	.3	.0	.0	.4	.8	
	4-10	.7	.1	.0	.0	.0	.0	.0	.4	.0	.0	1.2	
	11-21	1.8	.1	.0	.0	.0	.4	.3	1.3	.0	.0	3.8	
	22+	1.6	.4	.0	.5	.3	.0	.4	.7	.0	.0	3.8	
	TOT %	4.1	.6	.0	.5	.3	.5	1.0	2.3	.0	.4	9.6	
5<10	0-3	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.4	
	4-10	1.3	.4	.7	.1	1.9	3.8	2.2	1.5	.0	.0	11.9	
	11-21	3.3	.0	.0	.0	.9	1.5	3.2	5.8	.0	.0	14.6	
	22+	4.2	.2	.4	.1	.6	1.4	.9	1.4	.0	.0	9.2	
	TOT %	8.8	.6	1.1	.6	3.4	6.8	6.3	8.8	.0	.0	36.2	
10+	0-3	.4	.0	.0	.0	.4	.8	.0	.0	.0	.4	1.9	
	4-10	1.8	.0	.4	1.3	1.7	2.4	1.8	2.5	.0	.0	11.9	
	11-21	2.4	.4	.3	.9	4.7	3.8	9.2	4.9	.0	.0	26.5	
	22+	.8	.0	.0	.4	.0	.9	2.8	.6	.0	.0	5.4	
	TOT %	5.4	.4	.7	2.5	6.8	7.8	13.8	8.0	.0	.4	45.8	
TOT OBS													260
TOT PCT		20.4	1.5	2.1	3.6	10.5	15.1	23.0	23.1	.0	.8	100.0	

OCTOBER

PERIOD: (PRIMARY) 1905-1977
(OVER-ALL) 1870-1977AREA 0026 GULF OF PEILAS
47.0S 76.4W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET) NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	6.5	.0	9.7	12.9	25.8	16.1	4.8	.0	.0	.0	75.8	24.2	62
06009	2.1	.0	6.3	18.8	14.6	18.8	2.1	2.1	.0	.0	64.6	35.4	48
12015	3.8	1.9	3.8	11.3	34.0	13.2	7.5	.0	.0	.0	75.5	24.5	53
18021	.0	1.9	1.9	20.8	17.0	22.6	3.8	.0	.0	.0	67.9	32.1	53
TOT	7	2	12	34	50	38	10	1	0	0	154	62	216
PCT	3.2	.9	5.6	15.7	23.1	17.6	4.0	.5	.0	.0	71.3	28.7	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	1.4	1.4	4.2	12.7	36.5	43.7	71
06009	1.5	2.9	4.4	4.4	42.6	44.1	68
12015	3.2	3.2	4.8	7.9	39.7	41.3	63
18021	1.6	4.7	1.6	14.1	28.1	50.0	64
TOT	5	8	10	26	98	119	266
PCT	1.9	3.0	3.8	9.8	36.8	44.7	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET) NH >4/8) BY HOUR

HOURL (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	6.7	16.7	40.0	38.3	21.7	60
06009	2.1	8.5	27.7	38.3	34.0	47
12015	3.9	13.7	33.3	45.1	21.6	51
18021	.0	5.8	34.6	34.6	30.8	52
TOT	7	24	72	82	56	210
PCT	3.3	11.4	34.3	39.0	26.7	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
60/64	.0	.0	.0	.4	.8	1.2	.0	.0	6	2.5
59/59	.0	.4	.0	.0	.4	1.2	.0	.0	8	3.3
50/54	.0	.0	.0	1.2	4.1	4.1	8.7	7.1	61	23.3
49/49	.0	.0	.0	.4	2.1	14.5	16.2	17.0	121	50.2
40/44	.0	.0	.0	.0	.8	4.1	7.9	5.0	43	17.8
35/39	.0	.0	.0	.0	.4	.4	.0	.0	2	.8
TOTAL	0	1	0	5	21	62	82	70	241	100.0
PCT	.0	.4	.0	2.1	8.7	25.7	34.0	29.0		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
60/64	.0	.0	.0	.5	.9	.6	.0	.0	.0	.4
59/59	1.3	.0	.0	.0	.4	.1	.3	.7	.0	.4
50/54	6.7	.8	.4	.1	1.0	2.9	3.8	8.6	.0	.8
49/49	8.3	.8	.3	1.8	5.5	8.4	13.9	10.8	.0	.4
40/44	1.5	.0	.7	1.0	.6	3.7	5.5	4.8	.0	.0
35/39	.4	.0	.0	.0	.0	.4	.0	.0	.0	.0
TOTAL	18.3	1.7	1.5	3.4	8.5	16.2	23.5	24.9	.0	2.1

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	90%	5%	1%	MIN	MEAN	TOTAL OBS
00003	61	58	52	46	41	39	37	46.7	383
06009	59	54	51	46	41	38	34	45.9	673
12015	61	55	52	47	41	39	36	46.9	367
18021	64	57	53	48	42	39	36	47.7	872
TOT	64	55	52	47	41	38	34	46.9	2295

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	4.5	6.0	35.8	32.8	20.9	81	67
06009	.0	.0	8.2	23.0	41.0	27.9	84	61
12015	.0	.0	8.3	21.7	36.7	33.3	85	60
18021	.0	5.2	12.1	20.7	27.6	34.5	83	58
TOT	0	6	21	63	85	71	83	246

OCTOBER

PERIOD: (PRIMARY) 1905-1977
(OVER-ALL) 1870-1977

TABLE 17

AREA 0026 GULF OF PEILAS
47.05 76.4WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37 40	41 44	45 48	49 52	53 56	57 60	61 64	TOT	N FOG	NO FOG
14/16	.0	.0	.0	.0	.0	.4	.4	2	.0	.9
11/13	.0	.0	.0	.0	1.3	.0	2.2	8	.0	3.5
9/10	.0	.0	.0	.0	.0	.4	.0	1	.0	.4
7/8	.0	.0	.0	.4	.4	.9	.0	4	.0	1.8
6	.0	.0	.0	.0	.9	.0	.0	2	.4	.4
5	.0	.0	.0	.9	.9	.0	.0	4	.9	.9
4	.0	.0	.0	1.8	.4	.0	.0	5	.0	2.2
3	.0	.0	.9	2.2	.4	.0	.0	8	.4	3.1
2	.0	.0	.0	4.0	1.3	.0	.0	12	1.3	4.0
1	.0	.0	3.5	6.2	.9	.0	.0	24	.9	9.7
0	.0	.9	3.5	4.0	.0	.0	.0	19	.4	7.9
-1	.0	.9	8.8	4.8	.0	.0	.0	33	.9	13.7
-2	.0	2.6	10.1	3.1	.0	.0	.0	36	.0	15.9
-3	.0	2.6	7.0	.4	.0	.0	.0	23	.0	10.1
-4	.9	3.1	3.1	.4	.0	.0	.0	17	.0	7.5
-5	.0	3.1	4.0	.4	.0	.0	.0	17	.0	7.5
-6	.0	1.3	1.3	.0	.0	.0	.0	6	.0	2.6
-7/-8	.9	.4	.0	.0	.0	.0	.0	3	.4	.9
-9/-10	.4	.0	.4	.0	.0	.0	.0	2	.0	.9
-11/-13	.0	.0	.0	.4	.0	.0	.0	1	.0	.4
TOTAL	5		97		15		6	227	13	214
PCT	2.2	15.0	42.7	29.1	6.6	1.8	2.6	100.0	5.7	94.3

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	1.3	.0	.0	.0	.0	1.3	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	4.9	.0	.0	.0	4.9	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	4.6	4.0	.0	.0	8.6	.0	.9	1.1	.9	.0	.0	2.9
5-6	.0	.0	.0	1.8	.0	.0	1.8	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.9	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.9	.0	.9	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.3	9.5	7.5	.9	.0	19.2	.0	.9	1.1	.9	.0	.0	2.9

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	1.8	.0	.0	.0	.0	1.8	.9	.0	.0	.0	.0	.0	.9
1-2	.0	.9	.0	.0	.0	.0	.9	.0	.9	.0	.0	.0	.0	.9
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.9	.9	.0	.0	.0	1.8
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.9	.0	.0	.9	.0	.0	.9	.0	.0	.0	.9
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.9
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.7	.0	.9	.0	.0	3.5	.9	1.8	1.8	.9	.0	.0	5.3

PERIOD: (OVER-ALL) 1963-1977

OCTOBER

AREA 0026 GULF OF PEILAS
47.05 76.4W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.7	.0	.0	.0	.0	.7	.9	.2	.0	.0	.0	.0	1.1
1-2	.0	.0	.7	.0	.0	.0	.7	.0	3.5	.2	.0	.0	.0	3.8
3-4	.0	.9	2.4	.0	.0	.0	3.3	.0	1.8	3.5	.9	.0	.0	6.2
5-6	.0	.7	.7	.0	.0	.0	1.3	.0	.2	1.1	.0	.0	.0	1.3
7	.0	.0	.0	.7	.0	.0	.7	.0	.0	.2	.2	.9	.0	1.3
8-9	.0	.9	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	.0	1.1
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	3.1	3.8	.7	.0	.0	7.5	.9	5.8	5.3	1.1	2.0	.0	15.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	2.2	.0	.0	.0	.0	2.2	
1-2	.0	1.8	3.1	.0	.0	.0	4.9	.0	.0	.9	.0	.0	.0	.9	
3-4	.0	1.8	7.3	2.7	.0	.0	11.7	.0	.9	6.6	1.3	.0	.0	8.8	
5-6	.0	.0	1.8	.0	.0	.0	1.8	.0	.0	3.5	.9	.0	.0	4.4	
7	.0	.9	1.5	1.5	.0	.0	4.0	.0	.0	2.7	.2	.0	.0	2.9	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.7	1.8	.0	.0	2.4	.0	.0	.0	1.8	.0	.0	1.8	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.7	.0	.7	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	4.4	14.4	6.0	.7	.0	25.4	.0	3.1	13.7	4.2	.0	.0	21.0	100.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	1.8	6.2	.0	.0	.0	.0	8.0	
1-2	.0	7.1	9.7	.0	.0	.0	16.8	
3-4	.0	7.1	26.5	9.7	.0	.0	43.4	
5-6	.0	.9	7.1	2.7	.0	.0	10.6	
7	.0	.9	5.3	4.4	.9	.0	11.5	
8-9	.0	.9	.0	.9	.0	.0	1.8	
10-11	.0	.0	.9	4.4	.9	.0	6.2	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	1.8	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	1.8	23.0	49.6	22.1	3.5	.0	100.0	113

PERIOD: (OVER-ALL) 1951-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.1	4.4	6.1	1.7	3.9	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	33	4
6-7	.0	.6	7.2	5.0	3.3	3.9	5.0	1.7	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	50	7
8-9	.0	.6	2.2	4.4	2.8	5.0	1.1	2.2	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	35	7
10-11	.0	.6	.0	.0	1.1	2.8	.6	3.9	3.2	5.0	.6	.6	1.1	.0	.0	.0	.0	.0	.0	35	14
12-13	.0	.0	.0	.0	.0	.0	.0	.6	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	14
>13	.0	.0	.0	.0	.0	.0	.0	1.1	.6	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	7	13
INDET	5.5	.0	1.1	1.1	.6	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	16	2
TOTAL	12	11	30	22	22	22	13	18	15	12	1	1	2	0	0	0	0	0	0	181	8
PCT	6.6	6.1	16.6	12.2	12.2	12.2	7.2	9.9	8.3	6.6	.6	.6	1.1	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1869-1977

NOVEMBER

AREA 0026 GULF OF PEILAS
47.05 76.4W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OBS TIME	PCPN PAST HOUR	THOR LTNG	FOG PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG SNOW	NO SIG WEA
N	27.1	2.7	12.0	.0	.0	.0	.0	40.0	11.1	.0	1.8	.0	3.1	.0	44.0
NE	14.7	.0	14.7	.0	.0	.0	.0	29.4	14.7	.0	.0	.0	.0	.0	55.9
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	40.0	.0	.0	.0	.0	.0	40.0	.0	.0	.0	.0	.0	.0	60.0
S	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.9	.0	79.9
SW	.0	3.0	9.7	.0	.0	.0	.0	12.7	6.7	.0	.0	.0	.7	.0	78.2
W	1.5	7.1	3.0	.0	.0	.0	.0	11.7	10.2	.0	.0	.0	.4	.0	59.0
NW	6.0	12.4	3.6	.0	.0	.0	.0	22.5	16.5	.0	1.6	.0	.0	.0	.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	8.8	6.3	6.3	.0	.0	.0	.0	21.0	10.5	.0	.8	.0	1.3	.0	66.4
TOT OBS:	238														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OBS TIME	PCPN PAST HOUR	THOR LTNG	FOG PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG SNOW	NO SIG WEA
00003	15.0	8.3	3.3	.0	.0	.0	.0	26.7	13.3	.0	.0	.0	.0	.0	60.0
06009	5.1	6.8	6.8	.0	.0	.0	.0	18.6	13.6	.0	.0	.0	1.7	.0	66.1
12015	6.3	4.7	7.8	.0	.0	.0	.0	18.8	7.8	.0	.0	.0	3.1	.0	70.3
18021	8.6	3.2	6.9	.0	.0	.0	.0	19.0	6.9	.0	3.4	.0	.0	.0	70.7
TOT PCT	8.7	6.2	6.2	.0	.0	.0	.0	20.7	10.4	.0	.8	.0	1.2	.0	66.8
TOT OBS:	241														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	.2	2.1	2.6	2.4	1.1	.0	8.5	19.4	6.4	41.7	8.3	6.3	10.5	.0	10.1	6.8		
NE	.1	.4	.3	.3	.1	.0	1.2	17.0	1.6	.0	.5	.4	1.8	20.0	1.3	.5		
E	.1	.5	.2	.1	.0	.0	.9	10.3	.9	.0	.3	1.2	1.0	.0	.9	1.2		
SE	.2	.8	.8	.1	.0	.0	2.0	10.4	2.1	.0	2.5	2.3	1.6	.0	1.5	2.2		
S	.6	3.4	3.6	1.7	.3	.1	9.7	14.5	9.8	.0	9.9	9.9	12.1	30.0	7.6	10.1		
SW	.8	5.4	6.6	3.7	1.3	.5	18.2	17.2	21.3	11.1	16.5	18.0	15.0	10.0	17.6	22.3		
W	.7	7.3	10.7	7.2	3.4	.4	29.7	19.0	26.3	38.9	29.9	33.4	29.0	7.5	30.8	28.5		
NW	.5	6.8	10.9	7.2	2.9	.4	28.7	19.1	31.4	8.3	31.2	26.2	26.9	32.5	28.6	28.1		
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
CALM	1.2						1.2	.0	.3	.0	.8	2.2	2.0	.0	1.5	.3		
TOT OBS	112	661	883	557	227	33	2473		17.8	374	9	371	323	396	10	651	339	
TOT PCT	4.5	26.7	35.7	22.5	9.2	1.3		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)				TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40				00	03	09	18
N	1.0	2.5	3.1	1.3	.5	8.5	19.4	7.2	7.3	10.3	9.0
NE	.2	.4	.2	.3	.0	1.2	17.0	1.6	.5	2.2	1.1
E	.3	.4	.2	.0	.0	.9	10.3	.9	.8	1.0	1.0
SE	.5	1.1	.3	.0	.0	2.0	10.4	2.1	2.4	1.6	1.7
S	2.3	2.9	2.4	1.0	.1	9.7	14.5	9.5	9.9	12.5	8.5
SW	2.6	7.7	4.5	2.6	.8	18.2	17.2	21.1	17.2	14.9	19.2
W	3.3	10.3	9.6	4.9	1.6	29.7	19.0	26.6	31.6	28.5	30.0
NW	2.9	9.6	9.9	5.0	1.3	28.7	19.1	30.8	28.9	27.0	28.4
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.2					1.2	.0	.3	1.4	2.0	1.1
TOT OBS	354	889	746	376	108	2473		383	694	406	990
TOT PCT	14.3	35.9	30.2	15.2	4.4	100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1869-1977

NOVEMBER

AREA 0026 GULF OF PEILAS
47.05 76.44

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	.3	2.3	31.6	33.9	20.9	9.7	1.3	17.6	100.0	383
0600Z	1.4	3.6	26.4	27.2	21.2	9.2	1.0	17.3	100.0	694
1200Z	2.0	4.7	28.3	32.3	25.1	6.9	.7	16.9	100.0	406
1800Z	1.1	2.9	24.4	26.8	23.0	9.9	1.8	18.7	100.0	990
TOT	90	82	661	883	557	227	32	17.8		2473
PCT	1.2	3.3	26.7	35.7	22.5	9.2	1.3		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.0	1.7	3.6	19.0	7.4	7.4
NE	.0	.0	.3	2.1	7.8	7.8
E	.0	.0	.0	.4	8.0	8.0
SE	.6	.0	.6	.3	4.8	4.8
S	1.0	1.4	4.0	2.8	5.6	5.6
SW	3.0	2.8	5.7	4.1	5.4	5.4
W	1.6	2.0	6.8	9.9	6.4	6.4
NW	1.8	3.4	7.0	11.8	6.3	6.3
VAR	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0
TOT OBS	15	20	51	90	176	6.4
TOT PCT	8.5	11.4	29.0	51.1	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	1.1	1.6	2.4	6.5	3.7	2.8	.4	.0	.0	.0	5.7	
NE	.6	.0	.1	.0	.1	1.1	.0	.0	.0	.0	.4	
E	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	
SE	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	
S	.0	.0	.4	.4	.6	.0	.0	.0	.0	.0	.6	
SW	.0	.0	.7	1.6	4.1	1.6	.0	.0	.0	.0	3.4	
W	.0	.0	.4	4.3	4.3	3.3	.0	.4	.0	.0	7.7	
NW	.0	.1	1.4	3.7	8.1	1.4	.1	.1	.0	.0	8.9	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT OBS	3	3	11	29	43	26	2	1	0	0	58	176
TOT PCT	1.7	1.7	6.3	16.5	24.4	14.8	1.1	.6	.0	.0	33.0	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.0	.0	.0	.0	.0	.0	.0	.0
= OR >5000	.6	.6	.6	.6	.6	.6	.6	.6
= OR >3500	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
= OR >2000	10.7	14.1	16.4	16.4	16.4	16.4	16.4	16.4
= OR >1000	26.6	35.6	40.1	40.1	40.1	40.1	40.1	40.1
= OR >600	36.2	48.6	55.9	57.1	57.1	57.1	57.1	57.1
= OR >300	36.7	50.8	60.5	63.3	63.3	63.3	63.3	63.3
= OR >150	36.7	51.4	61.6	64.4	65.0	65.0	65.0	65.0
= OR >0	36.7	51.4	62.1	65.5	66.7	66.7	66.7	66.7
TOTAL	65	91	110	116	118	118	118	118

TOTAL NUMBER OF OBS: 177

PCT FREQ NH <5/8: 33.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
	4.2	2.4	6.1	10.4	8.5	3.3	14.6	8.5	41.0	212

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1869-1977

NOVEMBER

AREA 0026 GULF OF PEILAS
47.05 76.4W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	PCP	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0
1<2	PCP	1.5	.4	.0	.0	.0	.0	.3	.3	.0	.0	2.5	.0
	NO PCP	.4	.0	.0	.0	.0	.0	.4	.4	.0	.0	.8	.0
	TOT %	1.9	.4	.0	.0	.0	.0	.3	.7	.0	.0	3.4	.0
2<5	PCP	3.2	.2	.0	.0	.0	1.3	.0	2.1	.0	.0	6.7	.0
	NO PCP	.4	.0	.0	.0	.7	1.1	.3	.4	.0	.0	2.9	.0
	TOT %	3.6	.2	.0	.0	.7	2.3	.3	2.5	.0	.0	9.7	.0
5<10	PCP	1.1	.0	.0	.4	.0	.1	1.3	1.4	.0	.0	4.2	.0
	NO PCP	4.0	1.3	.3	.2	.9	1.1	4.5	4.1	.0	.4	16.8	.0
	TOT %	5.0	1.3	.3	.6	.9	1.2	5.8	5.5	.0	.4	21.0	.0
10+	PCP	2.5	.4	.0	.0	.4	.8	.8	2.1	.0	.0	6.3	.0
	NO PCP	9.3	1.3	.0	.4	6.3	10.2	13.4	19.3	.0	2.1	58.4	.0
	TOT %	11.9	1.7	.0	.4	6.3	10.6	14.3	17.4	.0	2.1	64.7	.0
TOT OBS													238
TOT PCT													
		23.6	3.6	.3	1.1	8.0	14.1	20.7	26.2	.0	2.5	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.4	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.4	.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0
	TOT %	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.4	.0	.0	.0	.0	.4	.0	.0	.0	.0	.8	.0
	11-21	1.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	1.6	.0
	22+	.4	.4	.0	.0	.0	.0	.3	.1	.0	.0	1.2	.0
	TOT %	1.8	.4	.0	.0	.0	.4	.3	.7	.0	.0	3.5	.0
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.3	.1	.0	.0	.3	.5	.0	1.2	.0	.0	2.4	.0
	11-21	.7	.1	.0	.0	.0	.8	.0	.4	.0	.0	2.0	.0
	22+	2.4	.0	.0	.0	.6	1.1	.3	.8	.0	.0	5.1	.0
	TOT %	3.3	.2	.0	.0	.9	2.4	.3	2.4	.0	.0	9.4	.0
5<10	0-3	.4	.0	.3	.2	.3	.0	.0	.4	.0	1.2	2.7	.0
	4-10	1.5	.0	.0	.4	.3	.6	1.8	1.8	.0	.0	6.3	.0
	11-21	1.1	.4	.0	.0	.0	.0	2.1	1.6	.0	.0	5.1	.0
	22+	1.8	.8	.0	.0	.3	.5	2.0	1.8	.0	.0	7.1	.0
	TOT %	4.7	1.2	.3	.6	.9	1.1	5.8	5.5	.0	1.2	21.2	.0
10+	0-3	.3	.0	.0	.0	.0	.4	.0	.9	.0	2.0	3.5	.0
	4-10	4.9	1.1	.0	.0	2.5	4.8	5.0	6.9	.0	.0	25.1	.0
	11-21	2.5	.1	.0	.4	4.3	5.9	6.5	4.7	.0	.0	24.3	.0
	22+	3.4	.4	.0	.0	.0	.3	2.6	4.6	.0	.0	11.4	.0
	TOT %	11.1	1.6	.0	.4	6.8	11.4	14.1	17.1	.0	2.0	64.3	.0
TOT OBS													255
TOT PCT													
		22.1	3.3	.3	1.0	8.5	15.2	20.9	25.6	.0	3.1	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 399	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <3/8 ANY HGT	TOTAL OBS
00603	4.2	2.1	6.3	14.6	22.9	18.8	2.1	.0	.0	.0	70.8	29.2	48
06609	.0	.0	.0	8.1	29.7	16.2	.0	.0	.0	.0	54.1	45.9	37
12615	.0	.0	10.0	18.0	32.0	14.0	2.0	.0	.0	.0	76.0	24.0	50
18621	2.0	3.9	9.9	21.6	9.8	7.8	.0	2.0	.0	.0	52.9	47.1	51
TOT	3	3	11	30	43	26	2	1	0	0	119	67	186
PCT	1.6	1.6	5.9	16.1	23.1	14.0	1.1	.5	.0	.0	64.0	36.0	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00603	.0	3.2	3.2	12.7	17.5	63.5	63
06609	.0	.0	.0	9.7	22.6	67.7	62
12615	1.5	1.5	3.0	7.5	26.9	59.7	67
18621	.0	.0	7.6	7.6	16.7	68.2	66
TOT	1	3	9	24	56	167	238
PCT	.4	1.2	3.5	9.3	20.9	64.7	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <50VD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00603	4.3	13.0	34.8	41.3	23.9	46
06609	.0	.0	20.0	37.1	42.9	35
12615	.0	10.4	33.3	45.8	20.8	48
18621	2.1	12.5	37.5	18.8	43.8	48
TOT	3	17	57	63	57	177
PCT	1.7	9.6	32.2	35.6	32.2	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
55/59	.0	.0	.0	.0	2.2	5.2	3.5	1.3	28	12.2
50/54	.0	.0	.0	1.3	7.9	11.4	20.1	10.0	116	50.7
45/49	.0	.0	.0	.0	3.5	11.8	11.8	8.3	81	35.4
40/44	.0	.0	.0	.0	.0	.4	.9	.4	4	1.7
TOTAL	0	0	0	3	31	66	83	46	229	100.0
PCT	.0	.0	.0	1.3	13.5	28.8	36.2	20.1		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
2.8	1.0	.3	.7	.7	1.6	3.6	1.1	.0	.4	
13.5	1.5	.0	.4	6.6	6.1	8.1	14.4	.0	.0	
5.0	.4	.0	.0	3.9	6.2	11.5	7.9	.0	.4	
.5	.0	.0	.0	.0	.4	.0	.8	.0	.0	
21.9	2.9	.3	1.1	11.1	14.4	23.1	24.1	.0	.9	

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00603	61	58	55	48	43	39	27	48.5	383
06609	63	55	53	47	42	38	27	47.4	695
12615	64	56	54	48	43	41	28	48.5	405
18621	63	57	55	49	44	40	27	49.4	908
TOT	64	57	54	48	43	39	27	48.5	2391

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00603	.0	1.7	6.8	37.3	35.6	18.6	81	59		
06609	.0	.0	15.7	13.7	49.0	21.6	83	51		
12615	.0	.0	10.6	31.8	37.9	19.7	82	66		
18621	.0	3.6	21.4	30.4	23.2	21.4	79	56		
TOT	0	3	31	67	84	47	81	232		

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41 44	45 48	49 52	53 56	57 60	TOT	W FOG	W FOG
11/13	.0	.0	.0	.4	.9	3	.0	1.3
9/10	.0	.0	.4	1.8	.4	6	.0	2.7
7/8	.0	.0	2.2	2.7	1.3	14	.0	6.2
6	.0	.0	.4	.4	.4	3	.0	1.3
5	.0	.0	1.8	1.8	.9	10	.0	4.4
4	.0	.0	1.3	1.8	1.3	10	.0	4.4
3	.0	.4	1.3	1.3	.4	8	.0	3.3
2	.0	2.2	2.7	2.2	.4	17	.0	7.5
1	.0	.0	7.1	5.3	.0	28	.0	12.4
0	.0	2.2	6.2	3.1	.0	26	.4	11.1
-1	.0	1.8	5.3	3.1	.0	23	.0	10.2
-2	.0	5.3	4.9	.9	.0	25	.0	11.1
-3	.4	2.7	4.0	.9	.0	18	.0	8.0
-4	.9	2.2	1.3	.4	.0	11	.0	4.9
-5	.0	2.7	2.7	.0	.0	12	.0	5.3
-6	.9	1.8	.0	.0	.0	6	.0	2.7
-7/-8	.4	1.3	.0	.0	.0	4	.0	1.8
-9/-10	.4	.0	.0	.0	.0	1	.0	.4
-14/-18	.0	.4	.0	.0	.0	1	.0	.4
TOTAL	7	52	94	59	14	226	1	225
PCT	3.1	23.0	41.6	26.1	6.2	100.0	.4	99.6

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	1.0	.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
1-2	1.7	2.9	.7	.0	.0	.0	5.4	.0	.2	.0	.0	.0	.0	.2
3-4	.0	1.5	.7	.0	.0	.0	2.2	.0	.0	.2	.0	.0	.0	.2
5-6	.0	.0	6.9	1.0	.0	.0	7.8	.0	.0	.2	.0	.0	.0	.2
7	.0	.0	.0	1.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	3.9	.0	.0	3.9	.0	.0	.0	1.0	.0	.0	1.0
10-11	.0	.0	.0	2.0	.0	.0	2.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	1.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	1.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.7	5.4	8.3	8.8	1.0	.0	25.2	.0	.2	.5	1.0	.0	.0	1.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	1.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	1.0

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TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	SW	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	.0	1.0
1-2	.0	2.2	.7	.0	.0	.0	2.9	.0	.0	2.9	.5	.0	.0	.0	3.4
3-4	.0	.0	.7	.0	.0	.0	.7	.0	.0	2.0	4.2	.0	.0	.0	6.1
5-6	.0	.0	.0	.0	1.7	.0	1.7	.0	.0	.0	4.2	.0	1.2	.0	5.4
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	.0	1.2
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.7	.7	.0	.0	.0	1.5	.0	.0	.2	.2	.2	.0	.0	.7
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	1.2
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.9	2.2	.0	1.7	.0	6.9	.0	.0	6.1	9.1	1.5	2.5	.0	19.1

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	NW	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0	1.0	
1-2	.0	5.9	.7	.0	.0	.0	6.6	.2	3.4	1.2	.0	.0	.0	.0	4.9	
3-4	.0	1.0	1.7	.0	.0	.0	2.7	.0	4.4	4.2	1.0	.0	.0	.0	9.6	
5-6	.0	.0	1.7	.0	.0	.0	1.7	.0	1.0	1.7	2.0	.0	.0	.0	4.7	
7	.0	.0	.0	1.7	.0	.0	1.7	.0	.0	1.0	.0	.0	.0	.0	1.0	
8-9	.0	1.0	.0	.0	.0	.0	1.0	.0	.0	1.0	.0	.0	.0	.0	1.0	
10-11	.0	1.0	.0	2.2	.0	.0	3.2	.0	.0	.0	2.5	1.0	.0	.0	3.4	
12	.0	.0	.0	.7	.0	.0	.7	.0	.0	.0	.2	.0	.0	.0	.2	
13-16	.0	.0	.0	.0	1.0	.0	1.0	.0	.0	.0	1.0	.0	.0	.0	1.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	8.8	4.2	4.7	1.7	.0	19.4	1.2	8.8	9.1	6.6	1.0	.0	.0	26.7	100.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	1.0	1.9	.0	.0	.0	.0	2.9	
1-2	1.9	19.2	3.8	.0	.0	.0	25.0	
3-4	.0	8.7	12.5	1.0	.0	.0	22.1	
5-6	.0	1.0	14.4	2.9	2.9	.0	21.2	
7	.0	.0	1.0	3.8	.0	.0	4.8	
8-9	.0	1.0	1.0	4.8	.0	.0	6.7	
10-11	.0	1.9	1.0	6.7	1.0	.0	10.6	
12	.0	.0	.0	1.9	.0	.0	1.9	
13-16	.0	.0	.0	1.0	2.9	.0	3.8	
17-19	.0	.0	.0	.0	1.0	.0	1.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	2.9	33.7	33.7	22.1	7.7	.0	100.0	104

* PERIOD: (OVER-ALL) 1951-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
46	.0	6.9	6.9	4.4	1.3	3.8	.0	.6	1.3	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	41
5-7	.0	.6	2.5	7.5	3.1	1.3	8.8	1.3	1.3	1.9	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	5
8-9	.0	.0	.0	.0	5.6	2.5	2.5	4.4	1.9	.0	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	8
10-11	.0	.0	.0	.0	.6	3.8	2.5	.0	1.9	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	11
12-13	.0	.0	.0	.0	.0	1.9	3.1	1.3	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11
13-14	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
INDET	1.9	.6	.0	1.3	.6	.0	3.8	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	7
TOTAL	3	13	15	21	18	21	33	14	14	4	3	1	0	0	0	0	0	0	0	0	160
PCT	1.9	8.1	9.4	13.1	11.3	13.1	20.6	8.8	8.8	2.5	1.9	.6	.0	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1860-1977

DECEMBER

AREA 0026 GULF OF PEILAS
47.05 76.2W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	11.5	.0	6.9	.0	.0	.0	.0	18.3	6.4	.0	8.7	.0	1.8	.0	64.7
NE	54.2	.0	16.7	.0	.0	.0	.0	70.8	.0	.0	4.2	.0	.0	.0	25.0
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
S	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.9	.0	.0	.0	96.1
SW	.0	2.3	4.0	.0	.0	.0	.0	6.2	11.3	.0	.6	.0	2.8	.0	79.1
W	5.4	8.1	11.1	.0	.0	.0	1.3	25.9	5.4	.0	.0	.0	5.1	.0	63.6
NW	12.3	5.8	6.1	.0	.0	.0	.0	24.3	8.8	.0	3.5	.0	.0	.0	63.5
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	8.2	4.1	6.9	.0	.0	.0	.3	19.6	6.9	.0	3.1	.0	2.1	.0	68.4
TOT OBS:	291														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA								
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG BLWG	DUST SNOW	NO SIG WEA
00603	10.7	2.7	9.3	.0	.0	.0	.0	22.7	1.3	.0	2.7	.0	2.7	.0	70.7	
06609	8.1	0.8	6.8	.0	.0	.0	.0	21.6	10.8	.0	4.1	.0	1.4	.0	62.2	
12615	8.6	4.9	6.2	.0	.0	.0	1.2	21.0	7.4	.0	3.7	.0	2.5	.0	65.4	
18621	10.1	1.4	4.3	.0	.0	.0	.0	19.9	7.2	.0	1.4	.0	1.4	1.4	72.5	
TOT PCT	9.4	4.0	6.7	.0	.0	.0	.3	20.4	6.7	.0	3.0	.0	2.0	.3	67.6	
TOT OBS:	299															

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.2	2.8	4.7	3.1	1.4	.3		12.4	19.7		11.2	25.0	13.9	12.5	12.5	31.3	11.9	11.5
NE	.1	.4	.5	.3	.1	.1		1.4	17.8		1.4	.0	.8	1.3	1.7	.0	1.4	2.0
E	.0	.1	.1	.0	.0	.0		.2	9.9		.0	.0	.0	.0	.2	.0	.3	.5
SE	.0	.8	.4	.2	.0	.0		1.5	12.6		.9	.0	1.4	1.9	2.2	.0	1.8	.3
S	.6	3.5	4.3	1.4	.1	.0		9.9	13.6		10.2	10.9	9.8	10.2	11.8	8.3	7.5	11.5
SW	.3	6.4	7.7	3.5	.8	.1		18.8	13.5		21.4	4.7	20.3	20.6	17.5	.0	14.7	22.9
W	.7	6.9	10.2	5.7	1.2	.1		24.8	16.5		23.1	25.0	24.2	24.5	24.3	18.8	29.2	20.2
NW	.4	6.8	14.2	7.4	1.2	.2		30.2	17.2		31.6	28.1	28.1	27.6	29.4	41.7	31.8	31.0
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	.9							.9	.0		.3	6.3	1.4	1.2	.5	.0	1.3	.0
TOT OBS	75	658	999	514	113	16	2375		16.5		377	16	361	321	389	12	597	302
TOT PCT	3.2	27.7	42.1	21.6	4.8	.7		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40					00 03	06 09	12 15	18 21
N	1.0	4.7	3.8	2.1	.8		12.4	19.7	11.8	13.3	13.0	11.8
NE	.2	.7	.3	.2	.1		1.4	17.8	1.3	1.1	1.7	1.6
E	.1	.1	.0	.0	.0		.2	9.9	.0	.0	.2	.4
SE	.2	.9	.6	.0	.0		1.5	12.6	.9	1.6	2.1	1.3
S	1.5	5.0	2.8	.6	.0		9.9	13.6	10.2	10.0	11.7	8.9
SW	2.7	8.1	5.8	1.9	.2		18.8	15.5	20.7	20.5	17.0	17.4
W	2.8	10.7	7.8	3.2	.3		24.8	16.5	23.2	24.4	24.1	26.2
NW	2.7	11.7	12.0	3.6	.3		30.2	17.2	31.4	27.9	29.7	31.6
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	.9						.9	.0	.5	1.3	.5	.9
TOT OBS	284	991	784	277	39	2375		393	682	401	899	
TOT PCT	12.0	41.7	33.0	11.7	1.6		100.0		100.0	100.0	100.0	100.0

DECEMBER

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1880-1977

AREA 0026, GULF OF PEILAS
47.03 76.2W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)					48+	MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47				
00&03	.5	1.8	27.5	44.0	21.1	4.3	.8	16.2	100.0	393
06&09	1.3	1.5	30.4	41.9	20.1	4.4	.4	16.0	100.0	682
12&15	.5	3.2	31.7	41.9	18.2	3.5	1.0	15.6	100.0	401
18&21	.9	2.7	24.0	41.4	24.4	5.8	.7	17.3	100.0	899
TOT	21	54	658	999	514	113	16	16.5		2375
PCT	.9	2.3	27.7	42.1	21.6	4.8	.7		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	1.7	1.0	6.3	9.4		6.6
NE	.0	.0	.5	1.9		7.6
E	.0	.0	.0	.0		.0
SE	.0	.1	.0	.0		3.0
S	2.0	1.5	2.0	1.1		4.0
SW	1.7	1.2	6.6	5.4		6.0
W	.7	.0	9.2	15.2		7.2
NW	.3	1.8	6.6	20.6		7.2
VAR	.0	.0	.0	.0		.0
CALM	.0	.4	.8	2.0		7.2
TOT OBS	16	15	79	138	248	6.7
TOT PCT	6.5	6.0	31.9	55.6	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999			
N	1.0	.8	1.1	2.6	4.4	1.8	.4	.0	.0	.9	5.2	
NE	.5	.0	.0	.9	.4	.1	.0	.0	.0	.0	.5	
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
S	.0	.0	.0	.7	1.0	1.1	.0	.3	.0	.0	3.5	
SW	.0	.1	2.7	1.7	4.1	2.1	.0	.5	.2	.0	3.4	
W	.4	.3	3.7	3.7	7.2	3.2	.4	.0	.6	.4	3.1	
NW	.5	.4	.9	4.4	13.1	3.3	.8	.0	.0	.3	5.4	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.4	.0	.0	1.2	.4	.4	.4	.0	.0	.0	.4	
TOT OBS	7	4	21	43	76	30	5	2	2	4	54	248
TOT PCT	2.8	1.6	8.5	17.3	30.6	12.1	2.0	.8	.8	1.6	21.8	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	1.6	2.0	2.8	2.8	2.8	2.8	2.8	2.8
= OR >5000	2.4	2.8	3.5	3.5	3.5	3.5	3.5	3.5
= OR >3500	3.9	4.3	5.1	5.1	5.1	5.1	5.1	5.1
= OR >2000	11.8	15.7	16.9	16.9	16.9	16.9	16.9	16.9
= OR >1000	22.8	40.9	45.7	46.5	46.9	46.9	46.9	46.9
= OR >600	29.5	55.9	63.0	64.6	65.0	65.0	65.0	65.0
= OR >300	33.9	63.0	71.3	72.8	73.2	73.2	73.2	73.2
= OR >150	35.0	64.6	72.8	74.4	74.8	74.8	74.8	74.8
= OR >0	35.0	65.4	75.6	78.3	78.7	78.7	78.7	78.7
TOTAL	89	166	192	199	200	200	200	200

TOTAL NUMBER OF OBS 254

PCT FREQ NH <5/8 21.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
4.7	1.8	4.0	5.8	5.8	7.9	10.4	12.2	43.0	2.5	278

DECEMBER

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1860-1977

AREA 0026 GULF OF PEILAS
47.0S 76.2W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	
1<2	PCP	.9	.0	.0	.0	.0	.3	.2	1.3	.0	.0	2.7	
	NO PCP	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	TOT %	1.2	.1	.0	.0	.0	.3	.2	1.3	.0	.0	3.1	
2<5	PCP	1.5	.4	.0	.0	.0	.0	1.2	3.0	.0	.0	6.2	
	NO PCP	2.0	.0	.0	.0	.0	.3	.3	1.8	.0	.0	4.5	
	TOT %	3.5	.4	.0	.0	.0	.3	1.5	4.8	.0	.0	10.7	
5<10	PCP	.9	.7	.0	.0	.0	.6	4.0	2.0	.0	.0	8.2	
	NO PCP	4.0	.1	.0	.0	.3	3.3	6.1	8.3	.0	1.4	23.4	
	TOT %	4.9	.8	.0	.0	.3	3.9	10.1	10.3	.0	1.4	31.6	
10+	PCP	.0	.3	.0	.0	.0	.0	.9	.9	.0	.0	2.1	
	NO PCP	9.1	.4	.0	.1	6.4	10.7	12.5	12.1	.0	1.0	52.2	
	TOT %	9.1	.8	.0	.1	6.4	10.7	13.3	13.0	.0	1.0	54.3	
TOT OBS													
TOT PCT		18.7	2.1	.0	.1	6.6	15.2	25.5	29.4	.0	2.4	100.0	291

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	
	11-21	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	
	22+	1.2	.1	.0	.0	.0	.3	.2	.6	.0	.0	2.4	
	TOT %	1.2	.1	.0	.0	.0	.3	.2	1.3	.0	.0	3.1	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	1.1	.0	.0	.0	.0	.0	.0	.9	.0	.0	2.1	
	11-21	.9	.0	.0	.0	.0	.3	1.0	2.1	.0	.0	4.5	
	22+	1.5	.4	.0	.0	.0	.0	.5	1.7	.0	.0	4.1	
	TOT %	3.5	.4	.0	.0	.0	.3	1.5	4.8	.0	.0	10.7	
5<10	0-3	.0	.0	.0	.0	.0	.1	.3	.0	.0	1.4	1.7	
	4-10	1.3	.3	.0	.0	.3	1.3	3.7	1.7	.0	.0	8.6	
	11-21	2.2	.4	.0	.0	.0	1.1	3.9	6.1	.0	.0	13.7	
	22+	1.4	.0	.0	.0	.0	1.4	2.3	2.5	.0	.0	7.6	
	TOT %	4.9	.8	.0	.0	.3	3.9	10.1	10.3	.0	1.4	31.6	
10+	0-3	.3	.0	.0	.0	.0	.0	.0	.0	.0	1.0	1.4	
	4-10	3.3	.3	.0	.1	2.1	2.1	2.9	2.9	.0	.0	13.7	
	11-21	4.1	.4	.0	.0	3.6	6.0	8.4	8.0	.0	.0	30.6	
	22+	1.4	.0	.0	.0	.7	2.5	2.0	2.1	.0	.0	8.6	
	TOT %	9.1	.8	.0	.1	6.4	10.7	13.3	13.0	.0	1.0	54.3	
TOT OBS													
TOT PCT		18.7	2.1	.0	.1	6.6	15.2	25.5	29.4	.0	2.4	100.0	291

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1860-1977

DECEMBER

AREA 0026 GULF OF PEILAS
47.05 76.24

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY MGT	TOTAL OBS
00003	3.0	1.5	6.1	19.7	28.8	9.1	1.5	1.5	3.0	1.5	75.8	24.2	66
06009	4.8	1.6	3.2	17.5	39.7	4.8	1.6	.0	.0	1.6	74.6	25.4	63
12015	1.4	.0	15.3	19.4	22.2	18.1	1.4	1.4	.0	2.8	81.9	18.1	72
18021	6.0	3.3	6.6	13.1	26.2	13.1	3.3	.0	.0	1.6	73.8	26.2	61
TOT	10	4	21	46	76	30	5	2	2	5	201	61	262
PCT	3.8	1.5	8.0	17.6	29.0	11.5	1.9	.8	.8	1.9	76.7	23.3	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	4.0	9.3	37.3	49.3	75
06009	.0	1.4	1.4	12.2	31.1	54.1	74
12015	.0	.0	4.9	12.3	34.6	48.1	81
18021	.0	.0	4.3	11.6	23.2	60.9	69
TOT	0	1	11	34	95	158	299
PCT	.0	.3	3.7	11.4	31.8	52.8	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <50VD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	3.1	10.8	40.0	41.5	18.5	65
06009	5.0	11.7	38.3	41.7	20.0	60
12015	1.4	17.4	43.5	40.6	15.9	69
18021	6.7	16.7	35.0	40.0	25.0	60
TOT	10	36	100	104	50	254
PCT	3.9	14.2	39.4	40.9	19.7	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
60/64	.0	.0	.0	.8	2.0	.4	1.6	.0	12	4.7
59/59	.0	.0	.0	2.8	3.6	6.3	13.0	5.1	78	30.8
50/54	.0	.0	.0	.4	4.3	11.9	18.2	13.8	123	48.6
45/49	.0	.0	.0	1.2	1.2	2.8	5.5	4.0	37	14.6
40/44	.0	.0	.0	.0	.0	.4	.0	.4	2	.8
35/39	.0	.0	.0	.0	.0	.0	.0	.4	1	.4
TOTAL	0	0	0	13	28	55	97	60	253	100.0
PCT	.0	.0	.0	5.1	11.1	21.7	38.3	23.7		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
60/64	.8	.0	.0	.0	.0	.8	1.4	1.4	.0	.4
59/59	11.5	1.5	.0	.0	3.2	3.2	4.2	5.7	.0	1.6
50/54	7.5	.2	.3	.1	2.2	7.8	12.2	17.6	.0	.8
45/49	.6	.4	.0	.0	.9	4.2	3.9	4.7	.0	.0
40/44	.0	.0	.0	.0	.0	.0	.4	.4	.0	.0
35/39	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
TOTAL	20.4	2.1	.3	.1	6.2	15.9	22.0	30.2	.0	2.8

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	64	60	57	51	46	44	43	51.3	386
06009	63	58	55	50	45	43	41	50.1	681
12015	64	59	57	51	46	43	43	51.4	393
18021	66	61	58	52	46	44	39	52.1	823
TOT	60	61	57	51	45	44	39	51.2	2283

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	8.1	16.1	16.1	33.9	25.8	81	62
06009	.0	3.0	13.6	19.7	31.8	31.8	82	66
12015	.0	2.8	4.2	31.0	45.1	16.9	82	71
18021	.0	6.6	11.5	18.0	39.3	24.6	81	61
TOT	0	13	29	56	98	84	82	260

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1800-1977

DECEMBER

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47.05 76.2W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37 40	41 44	45 48	49 52	53 56	57 60	61 64	TOT	W FOG	NO FOG
11/13	.0	.0	.0	.0	.0	.4	.0	1	.0	.4
9/10	.0	.0	.0	.0	.0	.4	.7	3	.0	1.1
7/8	.0	.0	.0	.4	.7	1.4	.4	8	.0	2.9
6	.0	.0	.0	.0	1.4	.7	.4	7	.0	2.5
5	.0	.0	.0	.0	2.3	2.5	.4	15	.0	5.4
4	.0	.0	.0	.4	1.8	2.2	.7	14	.0	5.1
3	.0	.0	.0	.7	4.0	1.1	.0	16	.0	5.8
2	.0	.0	.0	2.2	4.7	.4	.4	21	.7	6.9
1	.0	.0	.0	3.6	5.1	2.2	.0	30	.4	10.5
0	.0	.0	1.4	6.9	7.2	1.8	.0	48	.7	16.6
-1	.0	.4	1.8	4.3	4.7	.4	.0	32	.7	10.8
-2	.0	.0	1.1	7.9	2.5	.4	.4	34	.0	12.3
-3	.0	.0	1.8	6.9	1.1	.0	.0	27	.0	9.7
-4	.0	.7	1.8	2.2	.0	.0	.0	13	.4	4.2
-5	.0	.0	1.1	.4	.7	.0	.0	6	.0	2.2
-6	.4	.0	.0	.0	.0	.0	.0	1	.0	.4
-7/-8	.0	.0	.0	.4	.0	.0	.0	1	.0	.4
TOTAL	1	3	25	100	38	9	9	277	8	269
PCT	.4	1.1	9.0	36.1	36.5	13.7	3.2	100.0	2.9	97.1

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	1.3	.0	.0	.0	.0	1.3	.0	.8	.0	.0	.0	.0	.8
1-2	.0	1.5	3.0	.0	.0	.0	4.5	.0	.0	.2	.0	.0	.0	.2
3-4	.0	1.3	.0	1.5	.0	.0	2.8	.0	.0	.0	.8	.0	.0	.8
5-6	.0	.8	1.3	2.8	.0	.0	4.9	.0	.0	.8	.0	.0	.0	.8
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.6	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.6	.6	1.3	.0	2.5	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	4.9	5.5	4.9	1.3	.0	16.7	.0	.8	.9	.8	.0	.0	2.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

PERIOD: (OVER-ALL) 1963-1977

DECEMBER

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TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							PCT	SW							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.2
1-2	.0	.6	.0	.0	.0	.0	.0	.6	.0	1.7	.9	.0	.0	.0	.0	2.7
3-4	.0	1.1	.8	.8	.0	.0	2.7	.0	.0	1.1	1.9	.0	.0	.0	.0	3.0
5-6	.0	.8	.6	.0	.0	.0	.6	.0	.0	.0	1.3	.8	.0	.0	.0	2.1
7	.0	.8	.8	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.8	1.5	.0	.0	.0	2.3	.0	.0	.0	.8	2.3	.0	.0	.0	3.0
10-11	.0	.0	.0	.8	.0	.0	.8	.0	.0	.0	.2	.8	.8	.0	.0	1.7
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.8
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	3.2	3.6	1.5	.0	.0	8.3	.0	.2	2.8	5.1	4.5	.8	.0	.0	13.4

HGT	W							PCT	NW							PCT	TOTAL PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+			
<1	.6	.0	.0	.0	.0	.0	.6	.0	.0	.9	.0	.0	.0	.0	.0	.9	
1-2	.0	2.1	2.8	.0	.0	.0	4.9	.0	.0	.9	2.8	.0	.0	.0	.0	3.8	
3-4	.0	.8	3.2	.8	.0	.0	4.5	.0	.0	1.9	7.0	.8	.0	.0	.0	9.7	
5-6	.0	.0	4.9	.6	.0	.0	5.5	.0	.0	.0	3.2	2.7	.0	.0	.0	5.9	
7	.0	.0	2.8	1.5	.0	.0	4.4	.0	.0	.0	.2	3.8	.0	.0	.0	4.0	
8-9	.0	.0	.0	1.5	.0	.0	1.5	.0	.0	.8	.9	.8	.0	.0	.0	2.5	
10-11	.0	.0	.6	.0	.0	.0	.6	.0	.0	.0	4.0	.2	.2	.0	.0	4.4	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.8	
13-16	.0	.8	.0	.0	.0	.0	.8	.0	.0	.0	.0	.0	.8	.0	.0	.8	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.6	3.4	14.4	4.4	.0	.0	22.7	.0	.0	4.5	18.2	8.9	.9	.0	.0	32.6	96.2

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	4.5	3.0	.0	.0	.0	.0	7.6	
1-2	.0	6.8	9.8	.0	.0	.0	16.7	
3-4	.0	6.1	12.9	4.5	.0	.0	23.5	
5-6	.0	.8	12.1	6.8	.0	.0	19.7	
7	.0	.8	3.8	5.3	.0	.0	9.8	
8-9	.0	1.5	3.8	4.5	.0	.0	9.8	
10-11	.0	.0	5.3	2.3	2.3	.0	9.8	
12	.0	.0	.0	1.5	.0	.0	1.5	
13-16	.0	.8	.0	.0	.8	.0	1.5	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	4.5	19.7	47.7	25.0	3.0	.0	100.0	132

PERIOD: (OVER-ALL) 1954-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
46	2.0	2.5	5.5	3.0	4.0	1.5	5.0	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	49	6
6-7	.0	.0	2.5	8.0	5.5	5.0	1.5	.5	1.5	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	30	7
8-9	.0	.0	2.5	5.5	3.5	3.0	4.0	3.5	3.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	51	8
10-11	.0	.0	4.0	1.0	1.0	1.5	1.5	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	23	7
12-13	.0	.0	1.0	1.0	.0	1.0	.0	1.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	7
3-13	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	15	15
INDET	4.0	.5	.5	.5	.0	.0	1.5	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	16	4
TOTAL	12	6	32	38	28	24	27	17	14	1	2	0	0	0	0	0	0	0	0	201	7
PCT	6.0	3.0	15.9	18.9	13.9	11.9	13.4	8.5	7.0	.5	1.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1905-1978
(OVER-ALL) 1854-1978

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TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	18.1	4.4	10.0	.0	.2	.0	.0	32.2	11.0	.2	3.4	.2	.4	.1	52.5
NE	22.0	3.9	6.4	.0	.0	.0	.0	32.3	10.8	.2	1.9	.0	.0	.0	54.9
E	7.4	5.8	7.2	.0	.0	.0	.0	20.4	4.0	.0	2.1	.0	.0	.0	56.8
SE	6.5	4.5	.5	.0	.0	.0	.0	10.6	3.6	.0	3.3	.0	.0	.0	74.1
S	4.6	.7	2.2	.0	.0	.0	.3	7.7	4.9	.0	1.2	.0	1.0	.0	85.2
SW	2.7	1.7	4.3	.0	.4	.0	.1	9.2	7.9	.1	2.0	.1	1.1	.0	79.7
W	6.1	0.3	4.9	.0	.0	.0	1.3	18.6	13.5	.2	1.8	.4	.7	.0	64.8
NW	12.2	0.5	5.3	.0	.0	.0	.4	24.3	8.4	.3	4.6	.2	.3	.0	62.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	4.3	.7	1.4	.0	.0	.0	.0	6.4	4.9	.0	3.3	.0	.0	.0	76.8
TOT PCT	10.3	4.3	5.6	.0	.1	.0	.4	20.5	9.5	.2	2.8	.2	.6	*	66.3
TOT OBS:	2997														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00003	11.3	4.1	5.3	.0	.2	.0	.0	20.7	8.5	.2	2.7	.1	.5	.1	67.1
06009	9.2	5.0	5.7	.0	.1	.0	.3	20.4	10.2	.1	1.9	.3	.6	.0	66.6
12015	11.6	3.4	6.1	.0	.0	.0	.7	21.7	10.2	.2	2.9	.2	.7	.0	64.1
18021	10.4	4.1	5.9	.0	.0	.0	.8	20.6	9.5	.3	3.7	.1	.3	.1	65.5
TOT PCT	10.6	4.2	5.7	.0	.1	.0	.4	20.8	9.6	.2	2.8	.2	.6	*	65.8
TOT OBS:	3088														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.5	2.6	3.9	2.9	1.4	.4		11.6	19.7	11.5	19.6	11.6	9.8	11.6	20.1	12.9	10.9	
NE	.2	1.2	1.1	.6	.2	*		3.4	15.2	3.4	8.3	3.3	3.1	3.8	2.8	3.4	3.2	
E	.2	1.0	.6	.1	*	*		2.0	10.3	2.0	.8	2.1	2.1	2.1	1.3	1.8	1.7	
SE	.3	1.7	1.5	.5	.1	*		4.1	12.4	4.2	.0	4.2	4.1	4.6	2.8	3.9	4.2	
S	.7	3.9	4.2	1.8	.4	.1		11.1	14.7	11.1	8.1	10.9	11.5	12.7	10.8	9.7	11.4	
SW	.5	5.3	6.6	3.9	1.3	.3		17.9	17.5	18.2	5.9	18.3	19.2	18.3	9.5	15.5	20.3	
W	.6	5.3	8.5	5.9	2.0	.4		22.7	19.0	22.0	23.3	23.0	24.1	21.4	21.1	23.6	21.8	
NW	.5	4.6	9.6	6.8	2.7	.5		25.8	19.8	26.0	31.4	25.3	24.7	23.9	30.8	27.6	25.9	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	1.4							1.4	.0	1.7	2.6	1.4	1.3	1.6	.9	1.4	.9	
TOT OBS							27818		17.7	4509	75	4353	3769	4505	87	6718	3802	
TOT PCT	5.0	26.6	36.0	22.5	8.2	1.8		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	1.6	3.5	3.6	2.2	.8		11.6	19.7	11.7	10.8	11.8	12.2	
NE	.8	1.3	.8	.4	.1		3.4	15.2	3.5	3.2	3.8	3.4	
E	.6	.9	.3	.1	*		2.0	10.3	2.0	2.1	2.1	1.8	
SE	1.0	1.9	1.0	.2	*		4.1	12.4	4.1	4.1	4.6	4.0	
S	2.2	4.8	2.9	1.0	.3		11.1	14.7	11.0	11.2	12.6	10.3	
SW	2.3	7.3	5.0	2.6	.7		17.9	17.5	18.0	18.8	18.2	17.1	
W	2.4	7.9	7.7	3.7	1.0		22.7	19.0	22.0	23.5	21.4	23.0	
NW	2.4	8.5	8.7	4.7	1.5		25.8	19.8	26.1	25.0	24.0	27.0	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	1.4						1.4	.0	1.7	1.4	1.6	1.2	
TOT OBS						27818		17.7	4584	8122	4592	10520	
TOT PCT	14.8	36.1	29.8	14.9	4.4		100.0		100.0	100.0	100.0	100.0	

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PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HURR	CALM	WIND SPEED (KNOTS)						PCT	TOTAL	
		1-3	4-10	11-21	22-33	34-47	48+			MEAN
00G03	1.7	3.8	27.9	35.5	22.2	7.9	1.6	17.4	100.0	4584
06G19	1.4	3.3	26.8	36.8	21.9	8.2	1.7	17.6	100.0	8122
12G13	1.6	4.1	28.1	36.0	21.9	6.6	1.0	17.0	100.0	4592
18G21	1.2	3.4	25.6	35.5	23.3	9.0	2.0	18.8	100.0	10322
TGT								17.7		27918
PCT	1.4	3.6	26.6	36.0	22.5	8.2	1.8	17.7	100.0	

TABLE 5

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH $\geq 4/8$)
AND OCCURRENCE OF NH $\leq 5/8$ BY WIND DIRECTION

WIND DIR	MEAN CLOUD COVER					MEAN WIND SPEED BY WIND DIRECTION										NH	K5/8 ANY HGT	TOTAL OBS
	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	000 149	150 299	300 599	400 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+			
N	1.0	1.1	3.3	13.8	7.0	.9	.7	3.8	4.8	2.4	.6	.1	.1	.3	4.1			
NE	.0	.3	.9	3.0	6.7	.1	.1	1.0	1.1	.7	.2	.0	.0	.1	1.3			
E	.4	.3	.4	.8	4.4	.*	.*	.1	.3	.4	.*	.0	.0	.0	.9			
SE	.9	.4	.6	.8	4.5	.1	.0	.1	.2	.5	.1	.0	.0	.0	1.7			
S	2.5	1.8	3.6	2.7	4.6	.1	.*	.5	1.2	2.1	1.1	.3	.1	.0	5.2			
SW	1.5	1.9	5.4	4.4	5.7	.1	.3	.7	2.2	2.8	2.1	.4	.1	.1	4.6			
W	1.1	2.3	7.8	9.8	6.5	.1	.3	1.4	4.4	4.6	2.3	1.0	.1	.1	5.8			
NW	1.2	2.0	6.9	14.0	6.7	.7	.9	1.9	4.9	6.4	2.9	.8	.1	.1	5.9			
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0			
CALM	.2	.2	.8	1.1	5.8	.1	.0	.3	.4	.6	.2	.1	.1	.0	.7			
TOT OBS					2430										2430			
TOT PCT	9.4	10.2	29.9	50.4	100.0	2.6	2.1	7.3	17.5	23.1	12.2	3.4	.5	.4	100.0			

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH > 4/8) AND VSBY (NM)

	GEILING (FEET)	VSBY (NM)							
		= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR	>6500	.5	.7	.8	.9	.9	.9	.9	.9
= OR	>5000	.8	1.1	1.3	1.4	1.4	1.4	1.4	1.4
= OR	>3500	2.3	3.6	4.1	4.5	4.6	4.6	4.6	4.6
= OR	>2000	9.2	14.7	16.2	16.7	16.7	16.8	16.8	16.8
= OR	>1500	21.2	34.4	38.9	39.7	40.7	40.1	40.1	40.1
= OR	>1000	29.1	45.8	55.6	57.0	57.8	57.8	57.8	57.8
= OR	>500	31.8	5.5	62.0	64.0	64.8	64.9	65.0	65.0
= OR	>150	32.2	54.9	64.0	68.1	67.0	67.1	67.1	67.1
= OR	>50	32.4	55.6	65.6	68.1	69.3	69.8	69.9	69.9

TOTAL NUMBER OF OBSI 2467

PCT FREQ NH <5/81 30.1

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS CD	TOTAL OBS
4.6	3.4	6.4	7.1	7.9	7.4	10.2	11.0	40.0	1.9	2663

PERIOD: (PRIMARY) 1905-1978
(OVER-ALL) 1854-1978

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	*	.0	*	.0	*	*	.1	.1	.0	.0	.3	
	NO PCP	.1	*	*	*	*	*	.2	.2	.0	.0	.6	
	TOT %	.2	*	.1	*	.1	*	.3	.3	.0	.0	.9	
1/2<1	PCP	.4	*	*	.0	.1	.0	*	.1	.0	.0	.7	
	NO PCP	.3	*	*	*	.1	*	.1	.3	.0	*	.9	
	TOT %	.6	.1	.1	*	.2	*	.1	.4	.0	*	1.5	
1<2	PCP	.7	.2	*	.0	.0	.1	.3	.4	.0	*	1.7	
	NO PCP	.2	*	*	*	.1	*	.1	.4	.0	.0	.8	
	TOT %	.8	.2	*	*	.1	.1	.4	.8	.0	*	2.5	
2<5	PCP	2.3	.4	.2	*	.2	.3	.7	1.9	.0	.1	6.1	
	NO PCP	1.2	.2	.0	.1	.3	.3	.5	1.3	.0	*	3.9	
	TOT %	3.4	.6	.2	.1	.5	.7	1.1	3.2	.0	.1	10.0	
5<10	PCP	2.4	.5	.1	.2	.3	.6	1.8	2.3	.0	.1	8.2	
	NO PCP	4.0	.9	.1	.6	1.5	2.1	5.0	6.5	.0	.4	21.2	
	TOT %	6.4	1.4	.2	.8	1.9	2.7	6.8	8.8	.0	.4	29.4	
10+	PCP	.8	.2	.1	.1	.3	.3	.9	.9	.0	.1	3.7	
	NO PCP	7.9	2.4	1.3	1.8	7.5	9.0	10.8	9.9	.0	1.4	51.9	
	TOT %	8.7	2.6	1.4	1.9	7.8	9.2	11.7	10.8	.0	1.5	55.6	
TOT OBS													2936
TOT PCT		20.2	5.0	2.0	2.8	10.5	12.7	20.4	24.3	.0	2.1	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	*	*	.0	.0	.0	*	.0	.0	.1	
	4-10	.1	*	*	.0	*	*	.2	.1	.0	.0	.4	
	11-21	*	.0	*	.0	*	.0	.1	*	.0	.0	.3	
	22+	*	.0	.0	.0	*	*	*	.1	.0	.0	.2	
	TOT %	.2	*	.1	*	.1	*	.3	.3	.0	.0	.9	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	*	
	4-10	.1	*	*	*	.1	*	.1	.2	.0	.0	.6	
	11-21	.2	*	.0	.0	*	.0	*	*	.0	.0	.3	
	22+	.4	*	*	.0	.0	.0	.1	.4	.0	.0	.8	
	TOT %	.6	.1	.1	*	.1	*	.1	.6	.0	*	1.7	
1<2	0-3	*	.1	.0	.0	.0	*	*	.0	.0	*	.2	
	4-10	.1	.1	*	.0	*	.1	.2	.0	.0	.0	.6	
	11-21	.4	.1	.0	.0	.0	*	.1	.2	.0	.0	.8	
	22+	.3	.1	*	*	*	.1	.2	.4	.0	.0	1.1	
	TOT %	.8	.2	*	*	.1	.2	.4	.8	.0	*	2.7	
2<5	0-3	.1	.1	.0	.0	.0	*	.1	.1	.0	.1	.5	
	4-10	.5	.2	*	*	.2	.1	.2	.5	.0	.0	1.8	
	11-21	1.0	.2	*	*	.2	.3	.4	1.1	.0	.0	3.2	
	22+	1.6	.3	*	*	.2	.2	.5	1.6	.0	.0	4.5	
	TOT %	3.2	.8	.1	.1	.5	.7	1.1	3.3	.0	.1	9.9	
5<10	0-3	.1	*	.1	.1	.1	*	*	.1	.0	.6	1.2	
	4-10	1.1	.2	.1	.3	.8	1.2	1.4	1.5	.0	.0	6.7	
	11-21	2.3	.7	.1	.3	.7	.8	3.0	3.8	.0	.0	11.6	
	22+	2.7	.4	.1	.1	.2	.7	2.3	3.1	.0	.0	9.5	
	TOT %	6.2	1.4	.4	.8	1.8	2.7	6.7	8.5	.0	.6	28.9	
10+	0-3	.6	.1	.1	.1	.2	.2	.4	.2	.0	1.5	3.3	
	4-10	3.0	1.0	.9	.9	2.7	3.0	2.4	3.0	.0	.0	17.0	
	11-21	2.8	1.0	.5	.7	4.0	4.7	6.3	5.0	.0	.0	25.1	
	22+	1.9	.3	.1	.2	1.0	1.3	2.3	2.9	.0	.0	10.4	
	TOT %	8.3	2.6	1.6	1.9	8.0	9.3	11.5	11.1	.0	1.5	55.8	
TOT OBS													3158
TOT PCT		19.3	5.1	2.3	2.9	10.6	12.9	20.1	24.6	.0	2.2	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8) AND
OCCURRENCE OF NH < 5/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00603	2.5	2.0	7.1	18.2	21.9	10.3	3.4	.7	.6	.5	67.3	32.7	626
06609	3.4	1.2	4.0	16.7	22.6	11.2	3.0	.7	.4	1.0	63.9	36.1	573
12615	2.3	1.8	9.6	16.9	23.7	15.4	3.1	.2	.4	.4	73.9	26.1	665
18621	2.6	3.3	7.4	16.9	23.2	11.3	3.6	.4	.0	.5	69.1	30.9	669
TOT													2533
PCT	2.7	2.1	7.1	17.2	22.9	12.0	3.3	.5	.4	.6	68.8	31.2	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	< 1/2	1/2 < 1	1 < 2	2 < 5	5 < 10	10+	TOTAL OBS
00603	.9	1.4	2.6	10.8	30.1	54.3	781
06609	.5	1.2	2.5	9.4	32.3	54.0	800
12615	1.8	2.7	3.3	8.9	28.4	54.8	805
18621	.7	1.6	3.3	12.4	24.1	57.7	852
TOT							3238
PCT	1.0	1.8	3.0	10.4	28.7	55.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NH > 4/8) BY HOUR

HOURL (GMT)	< 150 < 50YD	< 600 41	< 1000 < 5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00603	2.6	12.5	36.5	33.3	30.3	607
06609	3.5	8.9	31.6	34.3	34.1	559
12615	2.4	15.8	38.4	37.9	23.8	648
18621	2.5	13.8	36.9	33.3	29.8	653
TOT						2467
PCT	2.8	13.0	36.0	34.8	29.2	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.1	.0	.1	.1	.0	.0	.3	
60/64	.0	.0	.0	.2	.4	.7	.6	.4	2.3	
55/59	.0	.1	.1	.4	2.2	5.3	5.5	3.7	17.2	
50/54	.0	.0	.1	.7	4.1	7.8	12.5	8.2	33.3	
45/49	.0	.0	.1	.8	3.2	9.9	11.0	8.0	33.0	
40/44	.0	.0	.0	.2	1.5	2.8	3.9	3.4	11.9	
35/39	.0	.0	.0	.0	.1	.3	.6	.8	1.8	
30/34	.0	.0	.0	.0	.0	.0	.1	.1	.3	
TOTAL									2772	100.0
PCT	.0	.1	.3	2.3	11.6	26.9	34.3	24.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	.1	.0	.0	.0	.1	.1	.0	.0	.0	.0
60/64	.5	.1	.0	.1	.2	.4	.4	.5	.0	.1
55/59	3.7	.6	.2	.2	1.9	2.0	3.2	4.7	.0	.7
50/54	7.2	1.7	.6	.4	2.5	4.0	6.7	9.3	.0	.8
45/49	6.5	1.5	.7	1.3	4.0	4.4	7.6	6.6	.0	.4
40/44	1.5	.6	.7	.6	1.9	1.8	2.3	2.2	.3	.3
35/39	.3	.1	.1	.1	.3	.2	.2	.3	.0	.2
30/34	.1	.0	.0	.0	.1	.1	.0	.0	.0	.0
TOTAL	19.9	4.6	2.3	2.7	10.9	13.0	20.5	23.5	.0	2.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00603	73	57	54	48	43	40	33	48.7	4575
06609	63	55	54	48	42	39	32	47.9	9101
12615	65	56	54	49	42	40	32	48.5	4348
18621	69	58	55	49	43	41	33	49.3	9869
TOT	73	57	54	49	43	40	32	48.7	27093

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00603	.0	2.7	12.6	27.6	32.9	24.1	81	743
06609	.0	1.8	11.7	26.0	33.5	27.0	82	679
12615	.0	2.2	9.6	26.2	37.4	24.6	82	720
18621	.0	4.2	12.4	27.8	33.3	22.4	80	716
TOT	0	82	343	764	971	698	81	2898

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	33 36	37 40	41 44	45 48	49 52	53 56	57 60	61 64	65 68	69 72	73 76	TOT	W FOG	WD FOG
17/19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	1	.0	*
14/14	.0	.0	.0	.0	.0	.0	.1	*	*	.0	.0	4	.0	.1
11/13	.0	.0	.0	.0	.1	.3	.3	.2	*	.0	.0	26	*	.9
9/10	.0	.0	.0	*	.1	.4	.1	.1	.1	.0	.0	23	*	.8
7/8	.0	.0	*	.1	.3	.5	.6	.2	.1	*	.0	56	*	1.9
6	.0	.0	.0	.1	.3	.7	.3	.1	.0	.0	.0	38	*	1.4
5	.0	.0	.0	.3	.5	.7	.8	.1	*	.0	.0	74	.1	2.4
4	.0	.0	.0	.6	.9	1.3	1.2	.2	.0	.0	.0	112	.1	3.7
3	.0	.0	.0	.6	1.3	1.8	.9	.2	.0	.0	.0	140	.1	4.7
2	.0	.0	.2	1.1	2.9	2.1	.9	.2	.0	.0	.0	204	.3	6.9
1	.0	.0	*	1.0	3.8	3.3	1.0	.1	.0	.0	.0	268	.3	8.9
0	.0	*	.4	2.9	4.5	3.4	1.2	*	.0	.0	.0	365	.3	11.9
-1	.0	*	.5	2.9	3.8	2.7	.5	.0	.0	.0	.0	291	.2	10.3
-2	.0	.1	.9	4.1	4.1	2.0	.2	*	.0	.0	.0	323	.1	11.4
-3	.0	.1	1.3	3.5	2.7	1.4	.1	.0	.0	.0	.0	244	*	9.0
-4	.0	.1	1.4	3.5	1.8	.5	.1	.0	.0	.0	.0	200	.1	7.3
-5	.0	.1	1.8	3.0	1.3	.4	*	.0	.0	.0	.0	164	.1	6.6
-6	.0	.5	1.8	1.3	.4	.2	*	.0	.0	.0	.0	109	.1	4.2
-7/8	.1	.4	1.4	1.3	.4	*	*	.0	.0	.0	.0	78	.1	3.2
-9/-10	.0	.2	.4	.3	*	*	.0	.0	.0	.0	.0	25	.1	1.0
-11/-12	.0	.3	.1	*	.1	.0	.0	.0	.0	.0	.0	14	.1	.4
-14/-16	*	.1	.0	*	.0	.0	.0	.0	.0	.0	.0	4	.0	.2
TOTAL												2763		
PCT	.1	2.1	10.5	25.9	29.3	21.8	8.3	1.6	.3	*	*	100.0	2.6	97.4

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.2	1.4	.2	.0	.0	.0	1.8	<1	.1	.4	.1	.0	.0	.0	.6
1-2	.3	2.3	2.1	.0	.0	.0	4.7	1-2	.2	1.0	.3	.0	.0	.0	1.6
3-4	.1	1.1	1.7	.7	.0	.0	3.6	3-4	.0	.4	.5	.2	.0	.0	1.0
5-6	.0	.2	2.7	1.4	.0	.0	4.3	5-6	.0	.0	.6	.1	.0	.0	.7
7	.0	.1	.7	1.0	.1	.0	1.8	7	.0	.0	.1	.2	*	.0	.4
8-9	.0	.1	.2	1.0	.2	.0	1.4	8-9	.0	.0	.1	.3	.1	.0	.5
10-11	.0	.0	.1	1.1	.3	.0	1.5	10-11	.0	.0	.0	.1	.0	.0	.1
12	.0	.0	.0	.4	.0	.0	.4	12	.0	.0	.0	*	.0	.0	*
13-16	.1	.0	.1	.3	.1	.0	.6	13-16	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.1	.1	.0	.1	17-19	.0	.0	.0	.0	.1	.0	.1
20-22	.0	.0	.0	.0	.0	.0	.0	20-22	.0	.0	.0	.0	.0	.0	.1
23-25	.0	.0	.0	.1	.0	.0	.1	23-25	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	26-32	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	33-40	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	41-48	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	49-60	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	61-70	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	71-86	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	87+	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.7	5.1	7.9	5.8	.8	.0	20.4	TOT PCT	.3	1.8	1.8	1.0	.3	.0	5.2

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.1	.4	.0	.0	.0	.0	.5	<1	.2	.1	.0	.0	.0	.0	.3
1-2	.0	.6	.3	.0	.0	.0	.9	1-2	.0	.3	.3	.0	.0	.0	.5
3-4	.0	.3	.1	.1	.0	.0	.4	3-4	.0	.3	.3	.1	.0	.0	.7
5-6	.0	.1	*	.1	.0	.0	.2	5-6	.0	*	*	.0	.0	.0	*
7	.0	*	.0	.2	.0	.0	.2	7	.0	*	.1	.1	.0	.0	.3
8-9	.0	.0	.1	.0	.0	.0	.1	8-9	.0	.0	.1	.0	.0	.0	.1
10-11	.0	.0	.0	.0	.0	.0	.0	10-11	.0	.0	.0	.1	.0	.0	.1
12	.0	.0	.0	.0	.1	.0	.1	12	.0	.1	.0	.0	.0	.0	.1
13-16	.0	.0	.0	.0	.0	.0	.0	13-16	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	17-19	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	20-22	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	23-25	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	26-32	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	33-40	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	41-48	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	49-60	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	61-70	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	71-86	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	87+	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.1	1.4	.5	.3	.1	.0	2.4	TOT PCT	.2	.8	.8	.3	*	.0	2.2

PERIOD: (OVER-ALL) 1963-1978

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TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.2	.3	.1	.0	.0	.0	.6	.3	.7	.0	.0	.0	.0	.9
1-2	.0	1.3	1.1	.0	.0	.0	2.4	.0	1.7	.6	.0	.0	.0	2.3
3-4	.0	.8	1.3	.3	.0	.0	2.4	.0	1.2	2.5	.1	.0	.0	3.8
5-6	.0	.1	1.0	.6	.1	.0	1.8	.0	.4	1.8	.7	.2	.0	3.2
7	.0	.2	.7	.1	.0	.0	1.0	.0	.2	.6	.2	.1	.0	1.1
8-9	.0	.3	.3	.1	.0	.0	.7	.0	.1	.5	.4	.0	.0	1.0
10-11	.0	.1	.4	.1	.0	.0	.6	.0	.1	.4	.3	.1	.0	1.0
12	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.1	.1	.0	.2
13-16	.0	.0	.0	.1	.2	.0	.2	.0	.1	.0	.1	.2	.0	.4
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.2
20-22	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	.1	.0	.0	.1
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.2	3.2	5.0	1.3	.3	.0	9.9	.3	4.4	6.5	2.1	.8	.0	14.1

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.2	.0	.0	.0	.0	.2	.2	.6	.1	.0	.0	.0	.8	
1-2	.1	1.7	1.8	.0	.0	.0	3.6	.1	1.7	2.5	.0	.0	.0	4.3	
3-4	.0	1.0	3.3	.6	.0	.0	4.8	.0	1.3	3.9	1.1	.0	.0	6.3	
5-6	.0	.8	2.8	.5	.1	.0	4.2	.0	.4	1.9	1.9	.1	.0	4.3	
7	.0	.3	1.4	1.2	.1	.0	2.9	.0	.1	1.7	1.0	.0	.0	2.9	
8-9	.0	.2	.3	.9	.0	.0	1.4	.0	.1	.3	1.1	.1	.0	1.6	
10-11	.0	.2	.3	.9	.1	.0	1.4	.0	.0	.6	1.4	.1	.0	2.1	
12	.0	.0	.1	.3	.0	.0	.4	.0	.0	.1	.6	.1	.0	.8	
13-16	.0	.1	.1	.5	.1	.0	.8	.0	.0	.1	.3	.4	.0	1.0	
17-19	.0	.0	.0	.0	.1	.0	.1	.0	.0	.1	.0	.1	.0	.2	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.2	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.1	4.2	9.9	4.9	.5	.0	19.7	.2	4.1	11.3	7.7	1.2	.0	24.5	98.4

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT DBS
<1	2.9	4.2	.4	.0	.0	.0	7.6	
1-2	.7	10.7	8.9	.0	.0	.0	20.3	
3-4	.1	6.3	13.5	3.1	.0	.0	23.0	
5-6	.0	1.9	10.8	5.3	.5	.0	18.6	
7	.0	1.0	5.4	3.9	.4	.0	10.7	
8-9	.0	.6	2.0	3.7	.3	.0	6.7	
10-11	.0	.3	1.9	4.0	.6	.0	6.7	
12	.0	.1	.2	1.6	.2	.0	2.1	
13-16	.1	.1	.2	1.4	1.0	.0	2.9	
17-19	.0	.0	.1	.1	.3	.0	.7	
20-22	.0	.0	.1	.1	.3	.0	.5	
23-25	.0	.0	.0	.1	.0	.0	.1	
26-32	.0	.0	.0	.0	.1	.0	.1	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	3.8	25.3	42.6	23.3	4.0	.0	100.0	1316

PERIOD: (OVER-ALL) 1952-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.9	5.4	6.1	4.6	2.7	2.1	1.5	.7	.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	522
6-7	.0	.4	2.9	4.7	4.0	3.3	3.0	1.5	2.0	.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	451
8-9	.0	.3	1.2	2.4	4.7	3.4	3.0	2.5	1.6	.9	.4	.1	.1	.0	.0	.0	.0	.0	.0	.0	417
10-11	.0	.0	.6	.8	1.7	2.5	1.3	1.8	1.3	.8	.8	.1	.1	.0	.0	.0	.0	.0	.0	.0	244
12-13	.0	.0	.2	.4	.2	.4	1.0	.7	1.2	.2	.2	.2	.1	.1	.0	.0	.0	.0	.0	.0	94
>13	.0	.0	.0	.3	.3	.4	.3	.3	.8	.3	.2	.1	.1	.0	.0	.0	.0	.0	.0	.0	67
INDET	3.7	.7	.9	.7	.9	.7	1.4	.6	.8	.3	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	234
TOTAL																					2029
PCT	5.6	7.5	11.9	12.7	14.5	12.9	11.4	8.1	8.3	3.2	1.8	.6	.4	.1	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1905-1978
(OVER-ALL) 1854-1978

TABLE 20

AREA 0026 GULF OF PEILAS
47.15 76.2W

PERCENT FREQUENCY OF OCCURRENCE OF SEA TEMP (DEG F) BY MONTH														
SEA TMP DEG F	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	PCT
96+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
95/96	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
93/94	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
91/92	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
89/90	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
87/88	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
85/86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
83/84	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
81/82	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
79/80	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
77/78	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
75/76	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
73/74	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
71/72	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
69/70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
67/68	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
65/66	.1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	*
63/64	*	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	*
61/62	.7	.8	.4	*	.0	.0	.0	.0	.0	.0	*	.0	48	.2
59/60	2.7	4.7	1.6	.3	.0	.0	.0	.0	.0	.0	.1	.3	231	.9
57/58	11.2	13.7	8.1	1.3	.1	.1	*	.0	.0	.1	.3	2.1	884	3.3
55/56	25.0	26.9	24.4	11.0	2.8	.3	.1	.1	.0	.4	2.0	10.8	2476	9.1
53/54	20.5	20.0	21.7	21.5	7.9	2.0	1.0	.2	.7	.7	7.3	18.6	2835	10.5
51/52	19.6	17.4	19.9	22.7	23.5	11.0	3.2	1.1	1.6	6.8	18.4	24.6	3861	14.3
49/50	13.3	11.8	16.9	24.2	28.2	27.2	19.4	12.7	12.0	24.4	27.7	21.6	5345	19.7
47/48	5.5	3.7	5.5	12.3	21.4	28.2	31.2	28.2	28.4	29.1	22.8	15.5	5122	18.9
45/46	1.3	1.0	1.1	4.2	13.7	22.6	32.1	39.6	36.8	28.3	17.3	5.9	4520	16.7
43/44	.1	.0	.2	1.3	1.8	6.0	9.8	14.6	14.4	8.4	3.5	.4	1339	4.9
41/42	.0	.0	.2	.3	.4	1.6	2.3	2.6	5.4	1.7	.4	*	326	1.2
39/40	.0	.0	.0	.1	*	.9	.6	.7	.8	.1	.1	.0	70	.3
37/38	.0	.0	.0	.1	*	.1	*	*	.0	*	.0	.0	8	*
35/36	.0	.0	.0	.0	.0	.0	*	.1	.0	.0	.0	.0	4	*
33/34	.0	.0	.0	.0	.0	.0	.0	*	.0	.0	.0	.0	2	*
31/32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
29/30	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
27/28	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
<27	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
TOTAL	2940	2290	2634	2144	2163	1793	2086	2466	2130	2368	2342	2323	27079	100.0
MEAN	59.3	53.7	52.9	51.1	49.4	47.8	46.9	46.2	46.1	47.4	48.9	51.0	49.5	

TABLE 21

PRESSURE (MB)

AVERAGE BY HOUR (GMT)

MO	0000	0300	0600	0900	1200	1500	1800	2100	MEAN	TOTAL OBS
JAN	1011	1006	1011	1011	1011	1009	1011	1011	1011	941
FEB	1012	1010	1012	1011	1012	1013	1011	1012	1011	688
MAR	1014	1014	1013	1011	1012	1010	1011	1012	1012	880
APR	1011	1016	1011	1009	1010	1018	1010	1010	1010	664
MAY	1010		1011	1012	1011		1009	1012	1011	624
JUN	1009	997	1009	1008	1008	986	1008	1008	1008	509
JUL	1009	994	1009	1009	1009	1002	1008	1009	1009	750
AUG	1010	1003	1010	1009	1009	1005	1008	1009	1009	791
SEP	1014	1013	1015	1015	1015	1009	1013	1017	1014	794
OCT	1013	1016	1013	1012	1013	1013	1012	1012	1013	832
NOV	1011	1015	1012	1012	1012	1020	1011	1012	1011	813
DEC	1010	1014	1010	1008	1010	1012	1009	1009	1010	895
ANN	1011	1009	1011	1011	1011	1009	1010	1011	1011	9181
OBS	1518	67	1402	837	1488	84	2921	854		

PERCENTILES

MO	MIN	1%	5%	25%	50%	75%	95%	99%	MAX
JAN	988	991	997	1006	1011	1018	1024	1026	1028
FEB	988	990	995	1006	1012	1018	1023	1026	1030
MAR	987	991	996	1006	1013	1019	1025	1027	1029
APR	984	988	992	1003	1011	1018	1026	1028	1029
MAY	983	984	992	1004	1012	1018	1026	1029	1031
JUN	985	985	989	999	1008	1017	1026	1029	1032
JUL	982	985	990	1000	1009	1017	1028	1032	1034
AUG	981	984	989	1000	1009	1018	1027	1032	1036
SEP	980	987	995	1007	1016	1023	1028	1032	1035
OCT	983	989	994	1006	1013	1019	1027	1031	1033
NOV	983	989	996	1006	1011	1018	1026	1029	1030
DEC	988	990	996	1004	1010	1015	1022	1025	1029

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1869-1978

JANUARY

AREA 0027 VALDIVIA
40.55 74.4W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	6.3	.0	1.6	.0	.0	.0	.0	7.8	21.1	3.1	.0	.0	.0	.0	71.1
NE	.0	.0	20.0	.0	.0	.0	.0	20.0	.0	.0	.0	.0	20.0	.0	60.0
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.0	10.5	.0	.0	.0	.0	10.5	.0	.0	13.2	.0	.0	.0	76.3
S	.0	.0	3.7	.0	.0	.0	.0	3.7	1.7	.0	3.0	.0	.7	.0	90.8
SW	.0	2.9	1.7	.0	.0	.0	.0	4.6	3.8	.0	.9	.0	.3	.0	90.5
W	.0	5.1	5.1	.0	.0	.0	.0	10.3	5.5	.0	.0	.0	.0	.0	84.2
NW	4.2	.0	3.2	.0	.0	.0	.0	7.4	6.3	.0	8.4	.0	.0	.0	77.9
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	.9	1.8	3.6	.0	.0	.0	.0	6.3	5.1	.3	2.1	.0	.6	.0	86.0
TOT OBS:	335														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00003	1.1	3.2	4.2	.0	.0	.0	.0	8.4	3.2	.0	2.1	.0	.0	.0	86.3
06009	1.4	1.4	4.2	.0	.0	.0	.0	6.9	5.6	1.4	4.2	.0	.0	.0	83.3
12015	1.2	1.2	4.7	.0	.0	.0	.0	7.1	8.2	.0	1.2	.0	.0	.0	83.5
18021	.0	1.2	1.2	.0	.0	.0	.0	2.4	3.5	.0	1.2	.0	2.4	.0	90.6
TOT PCT	.9	1.8	3.6	.0	.0	.0	.0	6.2	5.0	.3	2.1	.0	.6	.0	86.1
TOT OBS:	337														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21	
N	.6	3.2	1.9	1.2	.8	.1		7.8	15.5		6.7	21.9	7.2	7.1	8.2	8.3	9.2	7.4
NE	.2	.5	.4	*	*	.0		1.1	10.3		.8	3.1	.6	1.5	1.3	1.1	1.2	.6
E	.8	.4	*	.0	.0	.0		1.2	4.3		.5	.0	1.1	1.6	2.5	.0	1.2	.4
SE	.4	2.9	2.8	1.0	.0	.0		7.1	12.6		4.8	3.1	6.6	9.5	11.8	.0	5.4	5.8
S	1.8	13.5	15.9	5.1	.2	.0		36.5	13.3		26.7	21.9	36.5	40.1	38.5	11.1	33.5	36.5
SW	1.3	9.1	6.5	.9	.2	.0		18.0	10.8		21.3	40.6	21.3	15.3	15.2	44.4	14.5	19.9
W	1.1	6.2	5.4	1.5	.2	.0		14.4	12.4		16.0	9.4	12.2	10.8	12.5	11.1	17.7	16.0
NW	.7	4.9	4.0	1.2	.2	.0		11.0	12.1		10.6	.0	10.2	8.7	7.6	13.9	15.5	11.7
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	3.0							3.0	.0		2.8	.0	4.3	5.4	2.4	.0	2.0	1.5
TOT OBS	201	834	755	223	31	2	2046		12.2		362	8	349	279	334	9	456	249
TOT PCT	9.8	40.8	36.9	10.9	1.5	.1		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	06	12	18
	03	09	15	21								
N	2.1	2.6	1.5	1.2	.3		7.8	15.5	7.0	7.1	8.2	8.6
NE	.4	.4	.3	*	*		1.1	10.3	.8	1.0	1.6	1.0
E	.9	.3	.0	.0	.0		1.2	4.3	.5	1.4	2.4	.9
SE	1.8	3.2	1.9	.3	.0		7.1	12.6	4.8	7.9	11.5	5.5
S	6.9	17.5	9.8	2.2	.0		36.5	13.3	26.7	21.9	36.5	34.6
SW	4.6	10.3	2.6	.4	.0		18.0	10.8	21.7	18.6	16.0	16.4
W	3.5	7.1	2.7	.9	.0		14.4	12.4	15.8	11.5	12.5	17.1
NW	2.7	5.4	2.3	.5	.0		11.0	12.1	10.3	9.6	7.8	14.1
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	3.0						3.0	.0	2.7	.8	2.3	1.8
TOT OBS	330	960	434	115	7	2046		12.2	370	628	343	705
TOT PCT	25.9	46.9	21.2	5.6	.3		100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1869-1978

JANUARY

AREA 0027 VALDIVIA
40.55 74.4W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)							PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47	48+	MEAN		
0000Z	2.7	6.5	41.6	37.0	10.0	2.2	.0	12.3	100.0	370
0600Z	4.8	6.7	40.3	36.1	10.7	1.3	.2	11.8	100.0	628
1200Z	2.3	8.5	41.7	35.6	11.1	.6	.3	11.9	100.0	343
1800Z	1.8	6.4	40.3	38.2	11.5	1.8	.0	12.7	100.0	705
TOT	61	140	834	795	223	31	2	12.2		2046
PCT	3.0	6.8	40.8	36.9	10.9	1.5	.1	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 10	TOTAL OBS	MEAN CLOUD COVER
N	.5	1.0	3.3	3.5		6.6
NE	.1	.0	.8	.7		7.0
E	.3	.0	.5	.0		4.3
SE	1.0	.8	.6	.8		4.1
S	9.5	6.1	5.5	7.4		4.2
SW	3.7	4.7	8.7	8.4		5.4
W	2.1	2.2	7.3	10.3		6.3
NW	1.1	1.9	1.4	3.9		5.8
VAR	.0	.0	.0	.0		.0
CALM	1.7	.0	.3	.0		1.1
TOT OBS	58	48	82	101	289	5.3
TOT PCT	20.1	16.6	28.4	34.9	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH > 4/8)
AND OCCURRENCE OF NH < 5/8 BY WIND DIRECTION

000	150	300	600	1000	2000	3500	5000	6500	8000+	NH < 5/8 ANY HGT	TOTAL OBS
149	299	599	999	1999	3499	4999	6499	7999			
.0	.0	1.0	.3	2.6	1.0	.0	.3	.0	.0	3.0	
.0	.0	.0	.3	.3	.6	.0	.1	.0	.0	.2	
.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.3	
.3	.0	.1	.3	.3	1.2	.1	.0	.0	.0	1.8	
.5	.3	.5	4.1	3.9	1.8	.3	.0	.0	.0	17.1	
.2	.1	2.2	2.5	3.8	3.6	1.5	.0	.0	.1	11.4	
.3	.0	2.7	2.5	2.3	2.9	2.3	1.0	.0	.3	7.6	
1.5	.0	.0	.3	1.6	1.1	.7	.0	.0	.0	3.2	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.1	
.8	1	19	30	43	34	14	4	0	1	135	289
2.8	.3	6.6	10.4	14.9	11.8	4.8	1.4	.0	.3	46.7	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH > 4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	> 10	> 5	> 2	> 1	> 1/2	> 1/4	> 50YD	> 0
> 6500	.3	.3	.3	.3	.3	.3	.3	.3
> 5000	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
> 3500	5.8	6.5	6.5	6.5	6.5	6.5	6.5	6.5
> 2000	14.1	17.9	18.2	18.2	18.2	18.2	18.2	18.2
> 1000	25.1	32.0	32.3	32.6	32.6	32.6	33.0	33.0
> 600	33.3	42.3	42.6	43.0	43.0	43.0	43.3	43.3
> 300	38.1	47.8	48.8	49.5	49.5	49.5	49.8	49.8
> 150	38.5	48.1	49.1	49.8	49.8	49.8	50.2	50.2
> 0	38.5	48.8	49.8	50.5	51.2	51.9	52.9	52.9
TOTAL	112	142	145	147	149	151	154	154

TOTAL NUMBER OF OBS: 291

PCT FREQ NH < 5/8: 47.1

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
11.0	8.7	7.4	10.7	9.7	6.1	7.4	9.4	26.9	2.6	309

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1889-1978

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.3	.0	.0	.0	.0	.0	.0	.3	.0	.0	.6	
	NO PCP	.0	.0	.0	.3	.2	.1	.0	.3	.0	.0	.9	
	TOT %	.3	.0	.0	.3	.2	.1	.0	.6	.0	.0	1.5	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.2	.1	.0	.3	.0	.0	.6	
	TOT %	.0	.0	.0	.0	.2	.1	.0	.3	.0	.0	.6	
1<2	PCP	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
	NO PCP	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0	.3	
	TOT %	.0	.0	.0	.1	.5	.0	.0	.0	.0	.0	.6	
2<5	PCP	.3	.0	.0	.0	.0	.0	.3	.0	.0	.0	.6	
	NO PCP	.6	.0	.0	.0	.0	.3	.0	.0	.0	.0	.9	
	TOT %	.9	.0	.0	.0	.0	.3	.3	.0	.0	.0	1.5	
5<10	PCP	.0	.3	.0	.3	.5	.4	.7	.1	.0	.0	2.4	
	NO PCP	2.3	.3	.0	.0	1.9	3.2	2.8	.7	.0	.0	11.3	
	TOT %	2.3	.6	.0	.3	2.5	3.7	3.6	.8	.0	.0	13.7	
10+	PCP	.1	.0	.0	.0	.3	.7	1.0	.1	.0	.0	2.4	
	NO PCP	9.9	.9	.7	2.2	26.4	21.0	15.4	5.2	.0	2.1	79.7	
	TOT %	6.0	.9	.7	2.2	26.7	21.7	16.4	5.4	.0	2.1	82.1	
TOT OBS													335
TOT PCT		9.6	1.5	.7	2.8	30.1	25.8	20.3	7.1	.0	2.1	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.3	
	4-10	.0	.0	.0	.0	.2	.1	.0	.3	.0	.0	.3	
	11-21	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	
	22+	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	TOT %	.3	.0	.0	.3	.2	.1	.0	.5	.0	.0	1.3	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.2	.1	.0	.3	.0	.0	.5	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.2	.1	.0	.3	.0	.0	.5	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
	11-21	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0	.3	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.1	.5	.0	.0	.0	.0	.0	.6	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.3	
	4-10	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.3	.3	.0	.0	.0	.0	.5	
	22+	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	
	TOT %	.8	.0	.0	.0	.3	.3	.0	.0	.0	.3	1.6	
5<10	0-3	.0	.0	.0	.0	.2	.6	.0	.3	.0	.3	1.3	
	4-10	.0	.0	.0	.3	.5	1.7	1.8	.0	.0	.0	4.3	
	11-21	.3	.3	.0	.0	1.9	1.1	.7	.9	.0	.0	5.4	
	22+	1.8	.0	.0	.0	.3	.0	.7	.1	.0	.0	3.0	
	TOT %	2.1	.5	.0	.3	2.9	3.4	3.2	1.3	.0	.3	16.0	
10+	0-3	.5	.1	.4	.0	.6	.7	.3	.1	.0	2.2	4.8	
	4-10	3.8	.6	.2	1.2	9.3	9.2	5.6	2.6	.0	.0	32.5	
	11-21	.7	.1	.0	1.0	14.4	10.3	8.6	1.5	.0	.0	36.8	
	22+	.9	.0	.0	.0	4.1	.7	1.3	.8	.0	.0	7.8	
	TOT %	5.8	.8	.6	2.2	28.5	21.2	15.7	5.0	.0	2.2	82.0	
TOT OBS													372
TOT PCT		9.0	1.3	.6	2.8	32.3	25.0	19.2	7.1	.0	2.7	100.0	

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1869-1978

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <3/8 ANY HGT	TOTAL OBS
00003	1.2	.0	7.2	7.2	15.7	10.8	3.6	1.2	.0	.0	47.0	53.0	83
06009	4.8	.0	11.3	11.3	9.7	11.3	1.6	.0	.0	1.6	51.6	48.4	62
12015	3.9	1.3	5.2	10.4	20.8	13.0	7.8	1.3	.0	.0	63.6	36.4	77
18021	1.3	.0	2.5	11.4	10.1	10.1	5.1	2.5	.0	.0	43.0	57.0	79
TOT	8	1	19	30	43	34	14	4	0	1	154	147	301
PCT	2.7	.3	6.3	10.0	14.3	11.3	4.7	1.3	.0	.3	51.2	48.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	1.0	1.9	1.0	9.6	86.5	104
06009	3.4	1.1	.0	1.1	13.8	80.5	87
12015	2.3	.0	.0	1.1	17.0	79.5	88
18021	.0	.0	.0	3.2	15.8	81.1	95
TOT	5	2	2	6	52	307	374
PCT	1.3	.5	.5	1.6	13.9	82.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <3/8 AND 5+	TOTAL OBS
00003	1.2	8.6	17.3	30.9	51.9	81
06009	5.0	18.3	30.0	23.3	46.7	60
12015	4.0	10.7	21.3	44.0	34.7	75
18021	1.3	4.0	17.3	28.0	54.7	75
TOT	8	29	61	93	137	291
PCT	2.7	10.0	21.0	32.0	47.1	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
75/79	.0	.0	.0	.4	.0	.0	.0	.0	1	.4
70/74	.0	.0	.4	.4	.7	.0	.4	.0	5	1.8
65/69	.0	.0	.0	1.1	1.8	1.1	2.1	1.1	20	7.0
60/64	.0	.0	.0	1.8	7.0	13.7	13.4	11.6	135	47.5
55/59	.0	.0	.4	1.8	5.3	7.7	13.0	7.0	100	35.2
50/54	.0	.0	.0	.7	1.4	1.8	3.9	.4	23	8.1
TOTAL	0	0	2	17	46	69	93	57	284	100.0
PCT	.0	.0	.7	6.0	16.2	24.3	32.7	20.1		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
75/79	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0
70/74	.0	.2	.8	.1	.3	.1	.4	.0	.0	.0
65/69	.6	.4	.0	.1	1.9	1.3	1.3	.7	.0	.7
60/64	7.4	.7	.0	.8	14.9	9.3	9.9	4.5	.0	.0
55/59	1.7	.1	.0	1.1	10.4	9.6	8.7	3.0	.0	.7
50/54	.0	.0	.0	.0	1.8	3.5	1.6	.8	.0	.4
TOTAL	9.7	1.3	.8	2.0	29.3	23.9	22.3	9.0	.0	1.8

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	76	68	64	59	54	53	50	58.8	364
06009	67	65	62	57	52	50	45	57.0	627
12015	72	67	64	59	53	50	49	58.5	315
18021	76	72	67	60	55	53	46	60.6	559
TOT	76	68	65	59	53	51	45	58.7	1865

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	4.9	16.0	28.4	33.3	17.3	79	81
06009	.0	3.3	6.7	25.0	38.3	26.7	83	60
12015	.0	4.2	21.1	15.5	33.8	25.4	80	71
18021	.0	13.9	19.4	27.8	26.4	12.5	75	72
TOT	0	19	46	69	93	57	79	284

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1869-1978

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	65 68	69 72	73 76	TOT	N FOG	NO FOG
14/16	.0	.0	.0	.0	.3	.3	1.0	5	.0	1.6
11/13	.0	.0	.0	.0	.0	.6	.6	4	.0	1.3
9/10	.0	.0	.3	1.0	.6	.6	.0	8	.3	2.3
7/8	.0	.0	1.6	1.9	1.6	.3	.0	17	.0	3.5
6	.0	.0	.3	.6	.6	.0	.0	5	.0	1.6
5	.0	.0	.6	1.9	1.0	.0	.0	11	.0	3.5
4	.0	.0	.0	3.2	.0	.0	.0	10	.0	3.2
3	.0	.3	1.6	3.2	1.3	.0	.0	20	.3	6.1
2	.0	.3	2.9	4.2	.6	.0	.0	25	.0	8.0
1	.0	1.0	4.2	5.1	.3	.0	.0	33	.0	10.6
0	.0	1.9	6.1	5.1	.3	.0	.0	42	.3	13.2
-1	.0	2.3	5.8	4.8	.0	.0	.0	40	.0	12.9
-2	.3	3.9	3.2	2.6	.0	.0	.0	31	.6	9.3
-3	.6	2.3	3.2	1.0	.0	.0	.0	22	.3	6.8
-4	.6	1.9	2.6	.6	.0	.0	.0	18	.3	5.5
-5	.0	2.9	.6	.0	.0	.0	.0	11	.0	3.5
-6	.0	.3	.3	.0	.0	.0	.0	2	.0	.6
-7/-8	.0	.6	1.0	.0	.0	.0	.0	5	.0	1.6
-9/-10	.6	.0	.0	.0	.0	.0	.0	2	.0	.6
TOTAL	7	35	107	110	21	6	5	311	7	304
PCT	2.3	17.7	34.4	35.4	6.8	1.9	1.6	100.0	2.3	97.7

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.6	.0	.0	.0	.0	.6	.3	.6	.0	.0	.0	.0	1.0
1-2	.0	2.2	1.0	.0	.0	.0	3.2	.0	.0	.2	.0	.0	.0	.2
3-4	.5	.6	.0	.6	.0	.0	1.8	.0	.0	.6	.0	.0	.0	.6
5-6	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.6	1.3	.0	1.9	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.6
10-11	.0	.0	.0	.0	.6	.0	.6	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	3.5	1.6	1.3	1.9	.0	8.8	.3	.6	1.4	.0	.0	.0	2.4

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.0	.0	.0	.0	.0	1.0	.6	.0	.0	.0	.0	.0	.6
1-2	.0	.5	.0	.0	.0	.0	1.5	.0	1.0	.2	.0	.0	.0	1.1
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.6	.2	.0	.0	.0	.8
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.0	.5	.0	.0	.0	.0	1.4	.6	1.6	.3	.0	.0	.0	2.6

PERIOD: (OVER-ALL) 1963-1978

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TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.6	.5	.0	.0	.0	.0	1.1	.0	2.9	.0	.0	.0	.0	2.9	
1-2	.5	6.1	5.9	.0	.0	.0	12.5	.8	2.9	5.6	.0	.0	.0	9.3	
3-4	.0	.0	2.7	1.8	.0	.0	4.5	.0	.8	1.6	.2	.0	.0	2.6	
5-6	.0	1.1	2.9	1.1	.0	.0	5.1	.6	.8	4.3	.2	.0	.0	5.9	
7	.0	.0	1.1	1.3	.0	.0	2.4	.0	.8	1.0	.6	.0	.0	2.4	
8-9	.0	.6	1.3	.6	.0	.0	2.6	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	3.0	.0	.0	3.0	.0	.0	.0	.2	.0	.0	.2	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	1.1	8.3	13.9	7.9	.0	.0	31.3	1.4	8.2	12.5	1.1	.0	.0	23.2	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.5	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	
1-2	.0	5.4	1.0	.0	.0	.0	6.4	.0	2.4	1.0	.0	.0	.0	3.4	
3-4	.0	2.4	6.4	.0	.0	.0	8.8	.2	1.3	1.3	.0	.0	.0	2.7	
5-6	.0	.0	1.6	.0	.0	.0	1.6	.0	.0	.2	.0	.0	.0	.2	
7	.0	.5	1.8	.0	.0	.0	2.2	.0	.0	.6	.0	.0	.0	.6	
8-9	.0	.0	.0	.6	.0	.0	.6	.0	.0	.6	.0	.0	.0	.6	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	1.3	.0	.0	1.8	.0	.0	.2	.0	.0	.0	.2	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	8.8	11.2	1.9	.0	.0	22.0	.2	3.7	3.8	.0	.0	.0	7.7	99.4

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	3.2	5.1	.0	.0	.0	.0	8.3	
1-2	1.3	20.5	14.7	.0	.0	.0	36.5	
3-4	.6	5.8	12.8	2.6	.0	.0	21.8	
5-6	.6	1.9	9.6	1.3	.0	.0	13.5	
7	.0	1.3	4.5	2.6	1.3	.0	9.6	
8-9	.0	.6	2.6	1.3	.0	.0	4.5	
10-11	.0	.0	.0	3.2	.6	.0	3.8	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.6	1.3	.0	.0	1.9	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	5.8	35.3	44.9	12.2	1.9	.0	100.0	156

PERIOD: (OVER-ALL) 1954-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.8	7.6	9.8	7.1	2.2	3.6	.9	.4	2.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	80	5
6-7	.0	1.3	5.8	8.0	5.8	4.4	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	59	6
8-9	.0	1.8	3.1	3.1	6.7	.9	1.3	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	39	6
10-11	.0	.0	.0	.0	.9	.9	.4	.9	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	10
12-13	.0	.0	.0	.0	.4	.4	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	9
>13	.0	.0	.0	.4	.4	1.8	.4	.9	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	10	9
INDET	2.2	.9	1.8	2.2	.9	.4	2.2	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	225	5
TOTAL	9	26	46	47	39	28	14	7	9	0	0	0	0	0	0	0	0	0	0	0	6
PCT	4.0	11.6	20.4	20.9	17.3	12.4	6.2	3.1	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1805-1978

FEBRUARY

TABLE 1

AREA 0027 VALDIVIA
40.4S 74.4W

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA						
	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMDKE HAZE	SPRAY BLWG DUST SIG WEA
N	10.0	.0	12.5	.0	.0	.0	.0	19.2	9.2	.0	3.3	.0	.0	.0 68.3
NE	.0	.0	20.0	.0	.0	.0	.0	20.0	.0	.0	.0	.0	.0	.0 80.0
E	.0	.0	.0	.0	.0	.0	.0	.0	44.4	.0	.0	.0	.0	.0 59.6
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0 100.0
S	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	1.0	.0	1.9	.0 96.1
SW	2.6	.9	3.5	.0	.0	.0	.0	7.0	3.5	.0	.0	.0	.0	.0 89.5
W	7.9	1.6	3.2	.0	.0	.0	.0	12.7	3.2	.0	5.6	.0	.0	.0 78.6
NW	9.0	3.0	.7	.0	.0	.0	.0	12.7	6.7	.0	.7	.0	.0	.0 79.9
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0 .0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	14.3	.0	.0	.0 85.7
TOT PCT	3.6	.7	2.9	.0	.0	.0	.0	6.9	3.6	.0	1.8	.0	.7	.0 87.0
TOT OBS:	276													

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA						
	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMDKE HAZE	SPRAY BLWG DUST SIG WEA
00003	4.1	.0	1.4	.0	.0	.0	.0	5.4	1.4	.0	3.4	.0	.0	.0 87.8
06009	4.5	.0	6.1	.0	.0	.0	.0	9.1	3.0	.0	.0	.0	1.5	.0 86.4
12015	1.4	1.4	2.8	.0	.0	.0	.0	5.6	3.6	.0	.0	.0	.0	.0 88.9
18021	4.5	1.5	1.5	.0	.0	.0	.0	7.5	6.0	.0	1.5	.0	1.5	.0 83.6
TOT PCT	3.6	.7	2.9	.0	.0	.0	.0	6.8	3.9	.0	1.8	.0	.7	.0 86.7
TOT OBS:	279													

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.9	2.9	2.7	.9	.1	.1		7.6	12.4		6.2	20.0	7.1	5.6	8.4	31.8	9.3	6.9
NE	.3	1.3	.3	.1	.0	.0		2.1	8.1		2.3	.0	2.0	1.6	3.1	4.5	1.8	1.9
E	.4	.7	.4	.0	.0	.0		1.4	7.6		.2	.0	2.1	1.6	1.9	.0	1.7	1.1
SE	.7	4.3	3.0	.8	.2	.0		9.0	11.3		6.8	.0	8.6	13.0	12.0	.0	7.5	7.6
S	2.3	12.0	17.0	4.7	.6	.0		36.5	13.5		40.6	47.5	38.9	38.9	35.4	27.3	31.2	35.3
SW	1.6	8.4	7.0	1.2	.3	.0		18.6	11.4		21.9	5.0	18.2	15.3	14.9	9.1	19.2	25.0
W	.9	5.4	3.3	.9	.1	.0		10.6	11.0		10.0	27.5	10.9	10.1	10.3	15.9	12.1	8.7
NW	.6	3.6	4.2	1.2	.3	.1		9.9	13.6		8.2	.0	9.9	8.3	8.3	11.4	14.1	9.4
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	4.3							4.3	.0		3.7	.0	4.4	5.5	5.7	.0	3.1	4.1
TOT OBS	238	776	759	197	33	3	2006		11.8		349	10	342	291	314	11	421	268
TOT PCT	11.9	38.7	37.8	9.8	1.6	.1		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+						00	03	09	15	18
N	2.1	3.7	1.3	.5	.1			7.6	12.4		6.3	6.4	9.2	8.4	
NE	1.1	.7	.3	.0	.0			2.1	8.1		2.2	1.8	3.2	1.9	
E	.8	.6	.1	.0	.0			1.4	7.6		.2	1.9	1.8	1.5	
SE	3.0	4.1	1.6	.2	.0			9.0	11.3		6.6	10.6	11.6	7.5	
S	6.4	17.7	10.9	1.5	.0			36.5	13.5		40.8	38.9	35.1	32.8	
SW	5.2	9.4	3.4	.5	.1			18.6	11.4		21.4	15.8	14.7	21.4	
W	3.4	5.0	1.8	.3	.0			10.6	11.0		10.5	10.5	10.5	10.7	
NW	1.8	3.1	2.2	.7	.1			9.9	13.6		8.0	9.2	8.4	12.3	
VAR	.0	.0	.0	.0	.0			.0	.0		.0	.0	.0	.0	
CALM	4.3							4.3	.0		3.6	4.9	5.5	3.5	
TOT OBS	364	927	435	74	6	2006			11.8		359	633	325	689	
TOT PCT	28.1	46.2	21.7	3.7	.3			100.0			100.0	100.0	100.0	100.0	

FEBRUARY

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1865-1978

AREA 0027 VALDIVIA
40.45 74.4W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)						48+	MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47					
00003	3.6	6.4	38.2	38.7	11.4	1.7	.0	12.3	100.0	359	
06009	4.9	8.2	38.2	37.4	8.5	2.2	.5	11.7	100.0	633	
12015	5.5	9.2	38.2	35.7	9.8	1.5	.0	11.4	100.0	325	
18021	3.5	6.8	39.6	38.8	10.2	1.2	.0	11.8	100.0	689	
TOT	86	152	776	759	197	33	3	11.8		2006	
PCT	4.3	7.6	38.7	37.8	9.8	1.6	.1		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 8 BSCD	TOTAL OBS	MEAN CLOUD COVER
N	1.3	1.2	3.8	5.0		6.0
NE	.4	.0	.9	.0		5.3
E	.0	.3	.0	.0		4.0
SE	.9	.2	.4	.4		3.9
S	15.4	7.3	9.5	6.5		3.7
SW	4.1	2.5	8.2	6.2		5.4
W	.8	1.8	4.6	4.9		6.3
NW	.5	.5	4.5	5.7		6.9
VAR	.0	.0	.0	.0		5.0
CALM	.4	.4	.4	.9		5.6
TOT OBS	55	33	74	68	230	5.0
TOT PCT	23.9	14.3	32.2	29.6	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.4	1.2	1.6	1.6	1.7	.4	.4	.0	.0	.0	3.8
NE	.0	.0	.0	.0	.4	.0	.4	.0	.0	.0	.0	.4
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
SE	.0	.0	.0	.0	.4	.4	.0	.0	.0	.0	.0	1.1
S	.4	.0	.0	3.4	2.4	3.2	.8	.3	.3	.0	.0	27.9
SW	.0	.0	.0	3.6	2.4	3.5	1.1	.1	.1	.4	.4	9.8
W	.4	.0	.4	.9	2.2	2.4	.3	.0	.4	.0	.0	5.0
NW	.0	.0	.1	1.0	.5	3.6	.4	.0	.4	.0	.0	5.1
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.4	.4	.4	.0	.0	.0	.0	.0	.9
TOT OBS	2	1	4	23	24	35	8	2	3	1	125	230
TOT PCT	.9	.4	1.7	10.9	10.4	15.2	3.5	.9	1.3	.4	54.3	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
>5000	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
>3500	5.6	6.0	6.0	6.5	6.5	6.5	6.5	6.5
>2000	17.7	20.7	21.1	21.6	21.6	21.6	21.6	21.6
>1000	25.0	31.0	31.5	31.9	31.9	31.9	31.9	31.9
>600	33.6	40.9	42.2	42.7	42.7	42.7	42.7	42.7
>300	33.6	41.8	43.1	43.5	44.4	44.4	44.4	44.4
>150	33.6	41.8	43.1	44.0	44.8	44.8	44.8	44.8
>0	33.6	41.8	44.0	44.8	45.7	45.7	45.7	45.7
TOTAL	78	97	102	104	106	106	106	106

TOTAL NUMBER OF OBS: 232

PCT FREQ NH <5/8: 54.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
16.5	9.9	10.3	8.3	7.4	7.4	10.3	9.1	19.8	.8	242

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1865-1978

FEBRUARY

AREA 0027 VALDIVIA
40.45 74.4W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
	NO PCP	.0	.0	.0	.0	.4	.0	.0	.0	.0	.4	.7	
	TOT %	.0	.0	.0	.0	.4	.0	.0	.4	.0	.4	1.1	
1/2<1	PCP	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	
1<2	PCP	.7	.0	.0	.0	.0	.0	.0	.4	.0	.0	1.1	
	NO PCP	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	
	TOT %	1.1	.0	.0	.0	.0	.0	.0	.4	.0	.0	1.4	
2<5	PCP	.4	.0	.0	.0	.0	.0	.4	.7	.0	.0	1.4	
	NO PCP	.5	.4	.0	.0	1.1	.0	.0	.2	.0	.0	2.2	
	TOT %	.9	.4	.0	.0	1.1	.0	.4	.9	.0	.0	3.6	
5<10	PCP	.3	.4	.0	.0	.0	1.4	.4	.1	.0	.0	2.5	
	NO PCP	2.0	.4	.4	.0	2.5	2.8	2.7	1.9	.0	.7	13.4	
	TOT %	2.3	.7	.4	.0	2.5	4.3	3.1	2.0	.0	.7	15.9	
10+	PCP	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.7	
	NO PCP	5.9	.7	.5	2.2	33.6	16.4	7.2	8.5	.0	1.4	76.4	
	TOT %	5.9	.7	.5	2.2	33.6	16.4	8.0	8.5	.0	1.4	77.2	
TOT OBS													276
TOT PCT													

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.3	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.3	.0	.0	.3	.0	.0	.6	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.3	.0	.0	.3	.0	.3	.9	
1/2<1	0-3	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	22+	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	TOT %	.6	.0	.0	.0	.0	.3	.0	.0	.0	.0	.9	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	
	22+	.3	.0	.0	.1	.1	.0	.0	.3	.0	.0	.9	
	TOT %	.9	.0	.0	.1	.1	.0	.0	.3	.0	.0	1.5	
2<5	0-3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
	4-10	.6	.0	.0	.0	.6	.1	.1	.0	.0	.0	1.5	
	11-21	.3	.0	.0	.0	.3	.0	.3	.6	.0	.0	1.5	
	22+	.4	.3	.0	.0	.0	.0	.0	.1	.0	.0	.9	
	TOT %	1.3	.3	.0	.0	1.2	.1	.4	.7	.0	.0	4.1	
5<10	0-3	.1	.0	.0	.0	.0	.6	.3	.1	.0	1.2	2.4	
	4-10	.5	.3	.0	.0	1.3	2.1	1.3	.7	.0	6.2	6.2	
	11-21	1.2	.3	.3	.0	1.6	2.1	.9	.7	.0	7.1	7.1	
	22+	.3	.0	.0	.0	.3	.6	.0	.3	.0	1.5	1.5	
	TOT %	2.1	.6	.3	.0	3.1	5.4	2.5	1.9	.0	17.2	17.2	
10+	0-3	.1	.0	.0	.0	1.1	.4	.0	.1	.0	3.0	4.7	
	4-10	1.4	.3	.4	2.0	8.8	8.6	3.5	3.5	.0	28.4	28.4	
	11-21	3.2	.3	.0	.4	16.2	7.4	4.0	3.7	.0	35.2	35.2	
	22+	.2	.0	.0	.1	3.6	.9	.2	.1	.0	7.1	7.1	
	TOT %	5.0	.6	.4	2.5	31.7	17.2	7.7	7.4	.0	83.0	75.4	
TOT OBS													338
TOT PCT													

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1805-1978

FEBRUARY

AREA 0027 VALDIVIA
40.45 74.4W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HR	000	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NH <5/8 ANY MGT	TOTAL OBS
(GMT)	149	299	599	999	1999	3499	4999	6499	7999				
00003	1.6	.0	4.8	8.1	14.5	4.8	3.2	.0	.0	.0	37.1	62.9	62
06009	1.9	.0	.0	9.6	5.8	17.3	1.9	.0	1.9	1.9	40.4	59.6	52
12015	.0	.0	1.6	12.7	12.7	22.2	4.8	1.6	1.6	.0	57.1	42.9	63
18021	.0	1.8	.0	12.5	7.1	16.1	5.4	1.8	1.8	.0	46.4	53.6	56
TOT	2	1	4	25	24	35	9	2	3	1	106	127	233
PCT	.9	.4	1.7	10.7	10.3	15.0	3.9	.9	1.3	.4	45.5	54.5	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL
(GMT)							OBS
00003	2.4	2.4	.0	2.4	15.7	77.1	83
06009	.0	.0	2.2	6.7	19.1	71.9	89
12015	.0	1.2	1.2	2.4	18.1	77.1	83
18021	1.2	.0	2.3	4.7	17.4	74.4	86
TOT	3	3	5	14	60	256	341
PCT	.9	.9	1.5	4.1	17.6	75.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HR	<150	<600	<1000	1000+	NH <5/8	TOTAL
(GMT)	<50YD	<1	<5	AND 5+	AND 5+	OBS
00003	1.6	6.5	14.5	22.6	62.9	62
06009	2.0	2.0	13.7	29.4	56.9	51
12015	.0	1.6	14.3	42.9	42.9	63
18021	.0	3.6	19.6	28.6	51.8	56
TOT	2	8	36	72	124	232
PCT	.9	3.4	15.5	31.0	53.4	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL	PCT
									OBS	FREQ
70/74	.0	.0	.0	.0	.0	1.3	.4	.0	4	1.8
65/69	.0	.0	.0	.9	1.8	1.3	2.7	1.3	18	8.0
60/64	.0	.0	.0	2.7	7.1	11.6	12.3	6.7	91	40.6
55/59	.0	.0	.0	.9	5.8	13.8	14.3	8.0	96	42.9
50/54	.0	.0	.0	.0	1.3	1.3	2.2	1.8	15	6.7
TOTAL	0	0	0	10	36	66	72	40	224	100.0
PCT	.0	.0	.0	4.5	16.1	29.5	32.1	17.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.3	.0	.0	.0	.9	.0	.0	.6	.0	.0
1.8	.0	.3	.1	3.1	1.3	.3	.6	.0	.4
3.9	.9	.0	.4	13.8	9.8	4.0	6.8	.0	.9
3.6	.4	.4	1.5	17.2	8.5	6.6	3.8	.0	.9
.0	.9	.2	1.1	2.1	1.0	1.0	.3	.0	.0
9.6	2.2	1.0	3.1	37.2	20.6	11.9	12.1	.0	2.2

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL
(GMT)									OBS
00003	71	67	65	59	54	52	49	59.0	348
06009	67	65	62	57	53	50	49	57.5	624
12015	73	66	64	59	53	50	49	58.8	302
18021	77	70	67	61	55	52	49	61.2	518
TOT	77	68	65	59	54	51	49	59.1	1792

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL
(GMT)								OBS
00003	.0	3.6	14.5	41.8	23.6	16.4	79	55
06009	.0	2.0	16.0	30.0	34.0	18.0	79	50
12015	.0	4.7	18.8	26.6	26.6	23.4	79	64
18021	.0	7.0	14.0	21.1	43.9	14.0	79	57
TOT	0	10	36	67	72	41	79	226

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PERIOD: (PRIMARY) 1906-1978
(OVER-ALL) 1865-1978

TABLE 17

AREA 0027 VALDIVIA
40.4S 74.4W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	65 68	69 72	73 76	TOT	W FOG	WD FOG
14/16	.0	.0	.0	.0	.0	.0	.4	1	.0	.4
11/13	.0	.0	.0	.0	.4	.8	.0	3	.0	1.2
9/10	.0	.0	.0	.0	.0	.4	.0	1	.0	.4
7/8	.0	.0	1.2	2.7	.8	.4	.0	13	.0	5.0
6	.0	.0	.0	1.2	1.2	.0	.0	6	.0	2.3
5	.0	.4	.0	1.6	1.2	.4	.0	9	.4	3.1
4	.0	1.9	3.1	2.3	.4	.0	.0	20	.0	7.8
3	.0	.8	2.3	1.2	1.2	.0	.0	14	.4	5.0
2	.0	.8	4.3	4.3	1.2	.0	.0	27	.0	10.5
1	.0	1.9	5.0	6.2	.8	.0	.0	36	.8	13.2
0	.0	.8	8.5	4.3	.4	.0	.0	36	.4	13.6
-1	.0	2.7	6.6	1.2	.0	.0	.0	27	.0	10.5
-2	.8	4.3	3.1	1.6	.0	.0	.0	25	.0	9.7
-3	1.2	1.9	4.7	.8	.0	.0	.0	22	.0	8.5
-4	.0	1.6	.8	.8	.0	.0	.0	8	.0	3.1
-5	.0	.4	1.6	.0	.0	.0	.0	5	.0	1.9
-6	.0	.0	.4	.0	.0	.0	.0	1	.0	.4
-7/-8	.0	1.2	.0	.0	.0	.0	.0	3	.0	1.2
-9/-10	.4	.0	.0	.0	.0	.0	.0	1	.0	.4
TOTAL	6	48	107	72	19	5	1	258	5	253
PCT	2.3	18.6	41.5	27.9	7.4	1.9	.4	100.0	1.9	98.1

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	.8
1-2	.0	.0	1.7	.0	.0	.0	1.7	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.8	.6	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.8	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.8	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.8	4.0	.0	.0	.0	4.9	.0	.8	.0	.0	.0	.0	.8

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.6	.0	.0	.0	.0	.6	.0	1.1	.0	.0	.0	.0	1.1
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	.8
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.6	.0	.0	.0	.0	.6	.0	1.9	.0	.0	.2	.0	2.1

PERIOD: (OVER-ALL) 1963-1978

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AREA 0027 VALDIVIA
40.4S 74.4W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							PCT	SW							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	.6	.0	.0	.0	.0		.6	.0	1.1	.0	.0	.0	.0		1.1
1-2	1.5	2.3	2.3	.0	.0	.0		6.1	1.1	4.7	2.1	.0	.0	.0		7.8
3-4	.0	2.3	7.0	.0	.0	.0		9.3	.0	3.0	4.0	.0	.0	.0		7.0
5-6	.0	.0	6.4	.8	.0	.0		7.2	.0	1.7	3.8	.0	.0	.0		5.5
7	.0	.0	2.5	.8	.0	.0		3.4	.0	.0	.8	1.7	.0	.0		2.5
8-9	.0	.0	2.3	4.2	.0	.0		6.6	.0	.0	.2	.0	.0	.0		.8
10-11	.0	.0	.0	.8	.0	.0		.8	.0	.0	.8	.0	.0	.0		.8
12	.0	.0	.0	.0	.0	.0		.0	.0	.0	.8	.0	.0	.0		.8
13-16	.0	.0	.0	.8	.0	.0		.8	.0	.0	.0	.0	.0	.0		.0
17-19	.0	.8	.0	.0	.6	.0		1.5	.0	.0	.0	.0	.0	.0		.0
20-22	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
23-25	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
26-32	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
33-40	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
41-48	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
49-60	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
61-70	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
71-86	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
87+	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
TOT PCT	1.5	6.1	20.6	7.6	.6	.0		36.4	1.1	10.4	12.7	1.7	.0	.0		25.8

HGT	W							PCT	NW							PCT	TOTAL PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+			
<1	.0	1.5	.0	.0	.0	.0		1.5	.0	1.1	.0	.0	.0	.0		1.1	
1-2	.0	.6	3.8	.0	.0	.0		4.4	.0	2.5	3.6	.0	.0	.0		6.1	
3-4	.0	4.7	2.5	.0	.0	.0		7.2	.0	1.1	1.9	.0	.0	.0		3.0	
5-6	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
7	.0	.0	.0	.0	.0	.0		.0	.0	.0	2.5	.8	.0	.0		3.4	
8-9	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
10-11	.0	.0	.0	.0	.0	.0		.0	.0	.0	.8	.0	.0	.0		.8	
12	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
13-16	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
17-19	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
20-22	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
23-25	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
26-32	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
33-40	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
41-48	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
49-60	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
61-70	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
71-86	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
87+	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
TOT PCT	.0	5.8	6.4	.0	.0	.0		13.1	.0	4.7	8.9	.8	.0	.0		14.4	98.3

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	1.7	5.1	.0	.0	.0	.0	6.8	
1-2	2.5	11.9	13.6	.0	.0	.0	28.0	
3-4	.0	12.7	16.1	.0	.0	.0	28.8	
5-6	.0	1.7	11.0	.8	.0	.0	13.6	
7	.0	.0	3.9	3.4	.0	.0	7.3	
8-9	.0	.0	3.4	4.2	.0	.0	7.6	
10-11	.0	.0	1.7	.8	.0	.0	2.5	
12	.0	.0	.8	.0	.0	.0	.8	
13-16	.0	.0	.0	.8	.0	.0	.8	
17-19	.0	.8	.0	.0	.8	.0	1.7	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	4.2	32.2	52.5	10.2	.8	.0	100.0	118

PERIOD: (OVER-ALL) 1953-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.6	8.1	8.1	3.5	1.2	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	38
6-7	.0	.6	3.5	5.8	5.8	2.9	1.7	3.5	.6	2.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	46
8-9	.0	4.0	.0	2.3	5.8	5.2	3.5	.6	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	38
10-11	.0	.6	.0	1.7	.6	2.9	1.7	.0	.0	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	16
12-13	.0	.0	.6	.0	.0	.6	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4
>13	.0	.0	.0	.0	.0	.0	.0	.0	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4
UNDET	1.7	1.2	.6	.6	3.5	1.7	.6	1.7	2.9	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	27
TOTAL	4	25	22	24	30	24	13	12	10	9	0	0	0	0	0	0	0	0	0	0	173
PCT	2.3	14.5	12.7	13.9	17.3	13.9	7.5	6.9	5.8	5.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1907-1978
(OVER-ALL) 1872-1978

MARCH

AREA 0027 VALDIVIA
40.55 74.5W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	ND SIG WEA
N	9.0	5.5	2.8	.0	.0	.0	.0	17.2	4.8	.0	.0	.0	.0	.0	77.9
NE	17.1	.0	11.4	.0	.0	.0	.0	28.6	.0	.0	.0	.0	.0	.0	71.4
E	19.4	.0	.0	.0	.0	.0	.0	19.4	.0	.0	.0	.0	.0	.0	80.6
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
S	.0	.0	8.0	.0	.0	.0	.0	8.0	1.1	.0	.0	.0	.0	.0	90.9
SW	.5	2.1	3.2	.0	.0	.0	.0	5.8	3.2	.0	4.2	.0	.0	.0	86.8
W	2.9	1.9	1.9	.0	.0	.0	.0	6.8	3.4	.0	.0	.0	.0	1.9	87.9
NW	11.4	2.3	4.6	.0	.0	.0	.0	18.3	2.9	.0	2.3	.0	.0	.0	76.6
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	4.6	1.8	4.3	.0	.0	.0	.0	10.7	2.5	.0	1.1	.0	.0	.4	85.4
TOT OBS:	281														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	ND SIG WEA
00&03	9.2	1.0	2.0	.0	.0	.0	.0	12.2	.0	.0	1.0	.0	.0	.0	86.7
06&09	2.9	.0	5.9	.0	.0	.0	.0	8.8	4.4	.0	1.5	.0	.0	.0	85.3
12&15	.0	7.2	7.2	.0	.0	.0	.0	14.5	1.4	.0	.0	.0	.0	.0	84.1
18&21	6.2	1.5	1.5	.0	.0	.0	.0	9.2	4.6	.0	1.5	.0	.0	1.5	83.1
TOT PCT	5.0	2.3	4.0	.0	.0	.0	.0	11.3	2.3	.0	1.0	.0	.0	.3	85.0
TOT OBS:	300														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	1.3	4.2	2.9	1.0	.3	.0		9.8	12.0		7.9	16.7	10.4	9.7	8.7	35.7	11.7	8.9
NE	.3	1.4	.2	.1	*	.0		2.0	7.1		1.2	.0	2.2	3.0	3.3	.0	1.5	.6
E	.8	.9	.5	.0	.0	.0		2.1	6.9		2.1	.0	2.9	2.7	2.1	7.1	1.6	1.4
SE	.8	3.5	3.6	.9	.0	.0		8.8	11.6		5.7	.0	8.7	12.1	10.7	7.1	8.7	7.0
S	2.2	17.9	13.7	2.2	.2	.0		31.3	11.7		32.1	.0	30.9	35.0	35.7	14.3	24.3	33.5
SW	1.6	7.7	6.5	1.3	.3	*		17.4	11.7		20.4	50.0	17.5	15.7	15.4	14.3	15.8	20.3
W	1.2	5.6	4.2	1.2	.1	.0		12.3	11.3		13.0	16.7	11.4	8.3	10.3	.0	15.3	14.7
NW	1.3	4.5	4.7	1.1	.3	.0		11.9	12.4		12.0	16.7	11.2	8.8	9.8	21.4	16.9	10.0
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	4.4							4.4	.0		5.4	.0	4.7	4.8	4.2	.0	4.1	3.5
TOT OBS	310	904	808	176	28	1	2227		11.0		389	3	383	314	361	7	486	284
TOT PCT	13.9	40.6	36.3	7.9	1.3	*		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	03	06	12
N	2.9	4.2	2.1	.3	*		9.8	12.0	8.0	10.1	9.2	10.6
NE	1.2	.6	.1	*	.0		2.0	7.1	1.2	2.6	3.2	1.2
E	1.2	.8	.1	.0	.0		2.1	6.9	2.1	2.8	2.2	1.5
SE	2.4	4.4	1.6	.3	.0		8.8	11.6	5.7	10.2	10.6	8.1
S	7.7	16.2	6.6	.8	*		31.3	11.7	31.9	32.7	35.3	27.7
SW	4.6	8.9	3.0	.8	.1		17.4	11.7	20.7	16.7	15.4	17.5
W	3.9	5.7	2.2	.5	.0		12.3	11.3	13.1	10.0	10.1	15.1
NW	3.0	3.8	2.5	.3	.2		11.9	12.4	12.1	10.1	10.1	14.4
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	4.4						4.4	.0	5.4	4.7	4.1	3.9
TOT OBS	697	1040	407	77	6	2227		11.0	392	697	368	770
TOT PCT	31.3	46.7	18.3	3.3	.3		100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1907-1978
(OVER-ALL) 1872-1978

MARCH

AREA 0027 VALDIVIA
40.53 74.5W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	5.4	11.0	38.5	38.0	5.9	1.3	.0	10.7	100.0	392
0600Z	4.7	10.8	42.0	35.0	6.9	.6	.0	10.3	100.0	697
1200Z	4.1	7.3	45.4	32.9	9.8	.5	.0	11.1	100.0	388
1800Z	3.9	8.6	38.1	38.2	9.0	2.2	.1	11.9	100.0	770
TOT	99	211	904	808	176	28	1	11.0		2227
PCT	4.4	9.5	40.6	36.3	7.9	1.3	*		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS) BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	1.2	.4	4.1	6.7		6.6
NE	.0	.4	1.2	1.8		6.9
E	.7	.7	.0	.5		3.4
SE	.6	.6	.4	.2		3.3
S	5.8	5.4	10.8	5.5		4.8
SW	3.8	3.3	5.1	4.9		5.0
W	3.6	3.8	8.2	3.7		4.9
NW	2.0	1.0	4.0	6.5		6.1
VAR	.0	.0	.0	.0		.0
CALM	1.2	.4	1.2	.0		3.8
TOT OBS	46	39	85	72	242	5.3
TOT PCT	19.0	16.1	35.1	29.8	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8) AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000	130	300	600	1000	2000	3500	5000	6500	8000+	NH	<5/8	TOTAL
149	299	599	999	1999	3499	4999	6499	7999		ANY	HGT	OBS
.0	.4	.3	.4	3.2	3.1	.8	1.0	.0	.4	2.8		
.0	.4	.4	.4	.5	.8	.0	.0	.0	.0	.8		
.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	1.4		
.0	.0	.0	.0	.4	.0	.0	.0	.0	.1	1.3		
.0	.8	.3	.6	6.8	3.7	1.0	.4	.3	.7	12.7		
.8	.0	.9	.7	3.3	.6	1.0	.0	.1	.0	9.5		
.0	.0	.4	2.0	3.1	2.4	.4	.0	.0	.0	11.1		
.4	.4	.9	.4	2.4	3.0	.0	.2	.4	.0	5.4		
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
.0	.0	.0	.0	.0	.8	.0	.0	.0	.4	1.7		
3	5	8	11	49	35	8	4	2	4	113		
1.2	2.1	3.3	4.3	20.2	14.5	3.3	1.7	.8	1.7	46.7		242
												100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	OR			OR			OR			OR		
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0				
OR >6500	2.8	2.8	3.2	3.2	3.2	3.2	3.2	3.2				
OR >3000	3.2	4.4	4.8	4.8	4.8	4.8	4.8	4.8				
OR >3500	5.6	7.5	7.9	7.9	7.9	7.9	7.9	7.9				
OR >2000	13.5	21.4	22.2	22.2	22.2	22.2	22.2	22.2				
OR >1000	25.0	39.3	41.7	42.1	42.1	42.1	42.1	42.1				
OR >600	28.6	43.3	46.0	46.4	46.4	46.4	46.4	46.4				
OR >300	30.2	45.2	49.2	49.6	50.0	50.0	50.0	50.0				
OR >150	30.6	46.4	50.4	51.6	52.0	52.0	52.0	52.0				
OR >0	30.6	46.4	50.4	52.0	52.8	52.8	53.2	53.2				
TOTAL	77	117	127	131	133	133	134	134				

TOTAL NUMBER OF OBS: 252

PCT FREQ NH <5/8: 46.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
10.3	9.2	8.8	10.3	7.3	7.3	8.4	11.5	26.0	1.1	262

PERIOD: (PRIMARY) 1907-1978
(OVER-ALL) 1872-1978

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40.5S 74.5W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.4
	TOT %	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.4
1/2<1	PCP	.0	.0	.0	.0	.7	.1	.0	.0	.0	.0	.0	.8
	NO PCP	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.4
	TOT %	.0	.0	.0	.0	.7	.5	.0	.0	.0	.0	.0	1.1
1<2	PCP	.4	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.8
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.4
	TOT %	.4	.0	.0	.0	.4	.0	.0	.4	.0	.0	.0	1.1
2<5	PCP	.3	.4	.0	.0	.8	.8	.1	.0	.0	.0	.0	2.3
	NO PCP	.8	.4	.0	.1	.3	.0	.4	.0	.0	.0	.0	1.9
	TOT %	1.0	.8	.0	.1	.3	.8	1.1	.1	.0	.0	.0	4.2
5<10	PCP	1.7	.4	.0	.0	1.0	.2	.6	2.2	.0	.0	.0	6.1
	NO PCP	2.9	.1	.3	.4	3.6	2.8	2.7	2.9	.0	.4	.0	16.0
	TOT %	4.6	.5	.3	.4	4.7	2.9	3.2	5.1	.0	.4	.0	22.1
10+	PCP	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.4
	NO PCP	7.8	1.9	1.5	1.4	20.2	13.1	13.8	8.4	.0	2.7	.0	70.7
	TOT %	7.8	1.9	1.5	1.4	20.2	13.1	13.8	8.7	.0	2.7	.0	71.1
TOT OBS													
TOT PCT													
		13.8	3.1	1.8	1.9	26.1	17.7	16.2	14.4	.0	3.0	100.0	263

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.3	
	4-10	.0	.0	.0	.0	.6	.6	.0	.0	.0	.0	1.2	
	11-21	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.6	.9	.0	.0	.0	.3	1.8	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.6	
	11-21	.0	.0	.0	.0	.5	.1	.0	.0	.0	.0	.6	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.3	.0	.0	.0	.5	.4	.0	.0	.0	.0	1.2	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.6	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.3	.0	.0	.3	.0	.0	.6	
	22+	.5	.0	.0	.0	.0	.0	.0	.2	.0	.0	.6	
	TOT %	.5	.0	.0	.0	.3	.0	.0	.3	.0	.6	1.8	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.6	
	4-10	.5	.6	.0	.1	.2	.6	.6	.2	.0	.0	2.8	
	11-21	.3	.2	.0	.0	.0	.0	.3	.3	.0	.0	1.2	
	22+	.2	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3	
	TOT %	1.2	.8	.0	.1	.2	.6	.9	.5	.0	.6	4.9	
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.3	
	4-10	.5	.1	.2	.3	1.4	.8	1.2	2.0	.0	.0	6.5	
	11-21	2.8	.3	.0	.0	2.6	1.3	1.6	1.8	.0	.0	10.5	
	22+	.6	.0	.0	.0	.5	.5	.0	.6	.0	.0	2.2	
	TOT %	3.8	.4	.2	.3	4.5	2.6	2.8	4.5	.0	.3	19.4	
10+	0-3	.9	.0	.6	.5	1.2	1.2	.9	.3	.0	2.8	6.3	
	4-10	3.7	1.5	.6	1.3	7.4	6.1	7.1	2.5	.0	.0	30.2	
	11-21	2.3	.0	.5	.3	11.1	4.9	3.4	3.7	.0	.0	26.2	
	22+	.6	.0	.0	.2	2.3	.8	.6	1.5	.0	.0	6.2	
	TOT %	7.5	1.5	1.7	2.2	22.1	12.9	12.0	6.0	.0	2.8	70.8	
TOT OBS													
TOT PCT													
		13.3	2.7	1.9	2.6	28.2	17.5	15.7	13.5	.0	4.6	100.0	323

PERIOD: (PRIMARY) 1907-1978
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HR (GMT)	000	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NH <3/8 ANY MGT	TOTAL OBS
00003	1.5	2.9	2.9	4.4	22.1	8.8	1.5	2.9	.0	2.9	50.0	50.0	68
06009	1.6	.0	3.2	3.2	20.6	9.5	3.2	.0	1.6	3.2	46.0	34.0	63
12015	.0	4.5	3.0	7.6	24.2	16.7	3.0	1.5	1.5	.0	62.1	37.9	66
18021	1.7	1.7	5.2	1.7	10.3	22.4	5.2	1.7	1.7	1.7	53.4	46.6	58
TOT	3	6	9	11	50	36	8	4	3	5	135	120	255
PCT	1.2	2.4	3.5	4.3	19.6	14.1	3.1	1.6	1.2	2.0	52.9	47.1	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	2.4	1.2	2.4	3.5	20.0	70.6	85
06009	1.1	3.2	1.1	5.3	18.1	71.3	94
12015	.0	.0	2.7	6.7	18.7	72.0	75
18021	3.7	.0	2.4	4.9	20.7	68.3	82
TOT	6	4	7	17	63	237	336
PCT	1.8	1.2	2.1	5.1	19.3	70.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NH <3/8 AND 5+	TOTAL OBS
00003	1.5	7.5	16.4	34.3	49.3	67
06009	1.6	6.3	11.1	36.5	52.4	63
12015	.0	6.3	18.8	46.9	34.4	64
18021	1.7	8.6	13.8	39.7	46.6	58
TOT	3	18	38	99	115	252
PCT	1.2	7.1	15.1	39.3	45.6	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
70/74	.0	.0	.0	.4	.0	.4	.0	.0	2	.8
65/69	.0	.0	.0	.0	.4	.0	1.1	.4	5	1.9
60/64	.0	.0	.4	.4	3.8	12.3	13.4	6.1	95	36.4
55/59	.0	.0	1.9	.8	5.0	14.2	13.8	13.0	127	48.7
50/54	.0	.0	.0	.8	3.1	3.1	5.0	.4	32	12.3
TOTAL	0	0	6	6	32	78	87	52	261	100.0
PCT	.0	.0	2.3	2.3	12.3	29.9	33.3	19.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.4	.0	.3	.1	.0	.0
.4	.0	.0	.0	.3	.1	.4	.4	.0	.4
5.1	1.5	.0	.4	8.0	6.2	6.5	8.2	.0	.4
5.5	1.8	1.5	.9	11.6	8.8	11.2	5.8	.0	1.5
.4	.0	1.6	1.1	2.3	3.4	.8	1.5	.0	1.1
11.3	3.4	3.2	2.3	22.6	18.6	19.2	16.1	.0	3.4

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	66	65	63	57	52	50	48	57.3	407
06009	76	63	62	56	51	49	45	56.2	700
12015	72	65	63	57	52	50	49	57.3	368
18021	74	69	65	59	54	50	48	59.3	654
TOT	76	67	64	57	52	50	45	57.5	2129

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	4.7	10.3	29.0	32.7	23.4	81	107		
06009	.0	2.9	10.1	24.6	34.8	27.5	83	69		
12015	.0	3.9	13.0	27.3	33.8	22.1	80	77		
18021	.0	4.3	15.9	31.9	36.2	11.6	78	69		
TOT	0	13	39	91	110	69	81	322		

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	65 68	69 72	73 76	TOT	W FOG	WD FOG
11/13	.0	.0	.0	.0	.0	.7	.0	2	.0	.7
9/10	.0	.0	.0	.4	.4	.0	.4	3	.0	1.1
7/8	.0	.0	.0	.4	.0	.0	.0	1	.0	.4
6	.0	.0	.0	1.4	.0	.0	.0	4	.0	1.4
5	.0	.0	1.1	1.4	.0	.0	.0	7	.0	2.5
4	.0	.0	2.5	2.1	.0	.0	.0	13	.0	4.6
3	.0	.7	3.2	4.2	.7	.0	.0	25	.0	8.8
2	.4	.7	4.2	2.5	.0	.4	.0	23	.4	7.7
1	.0	.7	6.0	3.9	.0	.0	.0	30	.0	10.6
0	.0	3.2	6.3	2.8	.4	.0	.0	36	.0	12.7
-1	.0	3.2	9.2	3.2	.0	.0	.0	44	.0	15.5
-2	.4	6.7	6.7	1.4	.4	.0	.0	44	.4	15.1
-3	.0	1.8	4.2	.7	.0	.0	.0	19	.0	6.7
-4	.0	3.9	1.4	.0	.0	.0	.0	15	.0	5.3
-5	.7	1.1	.7	.0	.0	.0	.0	7	.0	2.5
-6	1.1	.4	.0	.0	.0	.0	.0	4	.0	1.4
-7/-8	.4	.4	.4	.0	.0	.0	.0	3	.0	1.1
-9/-10	1.1	.0	.4	.0	.0	.0	.0	4	.0	1.4
TOTAL	11	64	131	69	5	3	1	284	2	282
PCT	3.9	22.5	46.1	24.3	1.8	1.1	.4	100.0	.7	99.3

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							PCT	NE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.9	1.8	.0	.0	.0	.0	2.7	.0	1.8	.0	.0	.0	.0	.0	1.8	.0
1-2	.0	1.6	1.8	.0	.0	.0	3.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	1.6	.0	.0	.0	.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.9	.0	.0	.0	.9	.0	.9	.0	.0	.0	.0	.0	.9	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.9	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.9	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.9	4.9	3.6	.9	.0	.0	10.3	.0	2.7	.0	.0	.0	.0	.0	.0	2.7

HGT	E							PCT	SE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	.7	.0	.0	.0	.0	.7	.0	1.3	.0	.0	.0	.0	.0	1.3	.0
1-2	.9	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.2	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.4	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.9	.7	.0	.0	.0	.0	1.6	.0	1.6	.0	.4	.4	.0	.0	.0	2.0

PERIOD: (OVER-ALL) 1963-1978

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TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	2.2	.0	.0	.0	.0	2.2	.9	1.1	.0	.0	.0	.0	2.0
1-2	.0	1.6	5.1	.0	.0	.0	6.7	.0	2.2	.2	.0	.0	.0	2.5
3-4	.0	6.0	8.7	2.5	.0	.0	17.2	.0	2.9	3.1	1.1	.0	.0	7.1
5-6	.0	.0	1.8	.0	.0	.0	1.8	.0	.9	.9	.0	.0	.0	1.8
7	.0	.0	1.8	.0	.0	.0	1.8	.0	.0	2.0	.0	.0	.0	2.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.9
10-11	.0	.0	.7	.7	.0	.0	1.3	.0	.0	.2	.0	.0	.0	.2
12	.0	.7	.0	3.3	.0	.0	4.0	.0	.0	.2	.0	.0	.0	.2
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	10.5	18.1	6.5	.0	.0	35.0	.9	7.1	6.9	2.0	.0	.0	17.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	1.6	.0	.0	.0	.0	1.6	.0	1.1	1.8	.0	.0	.0	2.9	
1-2	.0	4.9	.7	.0	.0	.0	5.6	.0	1.3	1.1	.0	.0	.0	2.5	
3-4	.0	3.3	2.2	.0	.0	.0	5.6	.0	1.3	2.0	.0	.0	.0	3.3	
5-6	.0	.0	.9	.0	.0	.0	.9	.0	.0	1.8	.0	.0	.0	1.8	
7	.0	.0	.7	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.7	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	1.6	.0	.0	.0	1.6	.0	.0	.9	.0	.0	.0	.9	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	9.8	6.7	.0	.0	.0	16.5	.0	3.8	7.6	.0	.0	.0	11.4	96.4

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	5.4	11.6	1.8	.0	.0	.0	18.8	
1-2	.9	11.6	8.9	.0	.0	.0	21.4	
3-4	.0	15.2	16.1	3.6	.0	.0	34.8	
5-6	.0	1.8	6.3	.0	.0	.0	8.0	
7	.0	.0	4.5	.0	.0	.0	4.5	
8-9	.0	.0	.9	.9	.0	.0	1.8	
10-11	.0	.0	.9	.9	.0	.0	1.8	
12	.0	.9	.9	3.6	.0	.0	5.4	
13-16	.0	.0	2.7	.9	.0	.0	3.6	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	6.3	41.1	42.9	9.8	.0	.0	100.0	112

PERIOD: (OVER-ALL) 1952-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.9	9.0	10.4	3.6	2.7	.9	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	64
6-7	.0	.9	2.7	2.7	5.4	3.2	.9	3.6	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	46
8-9	.0	3.6	3.2	5.0	5.4	5.4	1.4	3.2	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	61
10-11	.0	2.7	.9	1.4	1.4	2.7	1.4	.9	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	26
12-13	.0	.0	1.8	.0	.5	.5	.5	.9	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	10
>13	.0	.0	.0	1.4	.5	.5	.5	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	7
INDET	.9	.5	.5	.9	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	7
TOTAL	4	37	43	33	35	29	13	19	8	0	0	0	0	0	0	0	0	0	0	221	6
PCT	1.8	16.7	19.5	14.9	15.8	13.1	5.9	8.6	3.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1907-1975
(OVER-ALL) 1871-1975

APRIL

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TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	8.6	7.0	7.5	.0	.0	.0	.0	23.1	5.4	.0	.0	.0	.0	.0	71.5
NE	12.3	6.2	1.5	.0	.0	.0	.0	6.2	26.2	7.7	.0	6.2	.0	.0	60.0
E	.0	.0	9.8	.0	.0	.0	.0	9.8	.0	.0	.0	.0	.0	.0	90.2
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
S	3.9	1.4	.0	.0	.0	.0	.0	5.3	2.5	.0	3.6	.0	.0	.0	88.6
SW	.8	6.3	7.8	.0	.0	.0	.0	14.8	.8	.0	1.6	.0	3.1	.0	79.7
W	7.3	5.3	8.0	.0	.0	.0	2.7	20.7	2.7	.0	2.7	2.7	.0	.0	71.3
NW	10.3	8.7	5.6	.0	.0	.0	.0	24.6	10.3	.0	.0	.0	.0	.0	65.1
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	10.0	.0	10.0	.0	.0	.0	.0	20.0	.0	.0	.0	.0	.0	.0	80.0
TOT PCT	6.1	4.6	4.9	.0	.0	.0	.8	16.0	3.8	.0	1.9	.4	.4	.0	77.6
TOT OBS:	263														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
0000	7.1	1.8	8.9	.0	.0	.0	.0	16.1	1.8	.0	3.6	1.8	.0	.0	76.8
0600	8.6	4.3	4.3	.0	.0	.0	.0	17.1	2.9	.0	.0	.0	.0	.0	80.0
1200	4.1	4.1	2.7	.0	.0	.0	1.4	12.2	4.1	.0	.0	.0	1.4	.0	82.4
1800	5.8	7.2	4.3	.0	.0	.0	1.4	18.8	5.8	.0	4.3	.0	.0	.0	71.0
TOT PCT	6.3	4.5	4.8	.0	.0	.0	.7	16.0	3.7	.0	1.9	.4	.4	.0	77.7
TOT OBS:	269														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	1.2	6.0	5.9	2.4	.9	.1		16.6	14.5	16.4	.0	16.0	18.0	15.2	14.3	18.0	15.2	
NE	.6	2.1	1.0	.5	.1	.1		4.4	11.7	3.2	.0	5.2	6.2	4.5	3.6	5.4	.8	
E	.6	1.8	.7	.6	.0	.0		3.2	7.7	2.5	.0	2.9	4.3	4.9	10.7	2.1	2.5	
SE	.7	4.3	3.8	.6	.0	.0		9.4	10.7	6.1	.0	7.9	13.4	13.4	21.4	9.4	6.0	
S	1.3	9.7	8.5	2.5	.2	.0		22.2	12.2	23.0	66.7	25.7	18.3	19.4	50.0	19.1	28.2	
SW	.6	4.9	3.6	1.1	.2	.0		11.3	11.4	14.2	.0	10.4	11.1	10.9	.0	10.2	12.0	
W	1.1	4.6	3.9	1.8	.5	.0		12.8	13.0	15.3	33.3	11.4	9.3	12.2	.0	15.1	12.8	
NW	.8	5.8	5.9	3.2	.7	.0		16.4	15.0	17.0	.0	14.4	16.1	14.1	.0	18.2	19.9	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	3.7							3.7	.0	2.3	.0	5.9	3.3	5.5	.0	2.4	2.5	
TOT OBS	216	828	670	244	50	5	2013	12.3		342	3	374	305	329	7	413	240	
TOT PCT	10.7	41.1	33.3	12.1	2.5	.2		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	03	06	12	18
N	3.5	7.4	3.8	1.6	.3		16.6	14.5	16.3	16.9	15.2	17.0	
NE	1.7	1.7	.6	.3	.1		4.4	11.7	3.2	5.7	4.5	3.8	
E	1.6	1.5	.1	.0	.0		3.2	7.7	2.5	3.6	5.0	2.3	
SE	3.0	4.8	1.4	.3	.0		9.4	10.7	6.0	10.3	13.5	8.2	
S	5.9	10.4	5.0	.9	.0		22.2	12.2	23.4	22.4	20.0	22.5	
SW	3.5	5.5	1.8	.5	.0		11.3	11.4	14.1	10.7	10.7	10.8	
W	3.5	5.5	2.9	.8	.2		12.8	13.0	15.4	10.5	11.9	14.2	
NW	2.8	7.0	4.8	1.7	.1		16.4	15.0	16.8	15.2	13.8	18.8	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	3.7						3.7	.0	2.3	4.7	5.4	2.5	
TOT OBS	586	880	412	121	14	2013	12.3		345	679	336	693	
TOT PCT	29.1	43.7	20.5	6.0	.7		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1907-1975
(OVER-ALL) 1871-1975

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				MEAN	PCT FREQ	TOTAL OBS
				11-21	22-23	34-47	48+			
00003	2.3	6.7	41.2	34.2	11.3	4.1	.3	12.7	100.0	345
06009	4.7	6.6	42.6	32.3	11.6	2.1	.1	11.8	100.0	679
12015	5.4	7.1	41.1	31.5	14.0	.9	.0	11.7	100.0	336
18021	2.5	7.7	39.7	34.8	12.1	2.9	.3	12.8	100.0	653
TOT	74	142	828	670	244	50	5	12.3		2013
PCT	3.7	7.1	41.1	33.3	12.1	2.5	.2	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.0	.4	4.4	10.1		7.3
NE	.0	.1	.7	3.4		7.0
E	1.2	1.5	1.6	.0		3.7
SE	1.6	.2	1.1	.4		3.4
S	15.6	3.8	5.4	5.4		3.2
SW	3.0	2.1	5.9	.4		4.5
W	1.7	4.3	5.2	4.6		3.4
NW	.6	.1	6.3	3.8		6.6
VAR	.0	.0	.0	.0		.0
CALM	1.8	.4	.4	1.8		4.7
TOT OBS	58	29	69	67	223	4.9
TOT PCT	26.0	13.0	30.9	30.0	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
149	299	599	999	1999	3499	4999	6499	7999			
.0	.0	.4	2.0	7.2	.3	.4	.0	.0	.0	4.5	
.0	.0	.0	1.9	1.9	.1	.0	.0	.0	.0	.0	.8
.0	.0	.0	.0	.0	.3	.4	.0	.3	.0	3.1	
.0	.0	.0	.0	.6	.0	.4	.0	.1	.0	2.2	
.4	.0	.9	1.3	3.3	1.3	.9	.4	.0	.0	21.5	
.0	.0	.0	.1	2.5	1.0	.4	.0	.0	.1	7.5	
.4	.0	.9	2.1	2.8	1.0	.8	.4	.0	.3	6.8	
.0	.0	.4	1.5	2.5	.8	1.0	.0	.0	.0	4.6	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.9	.0	.9	.0	.0	.0	.0	.0	2.7	
.2	.0	.8	2.0	4.8	1.1	1.0	.2	.1	.1	12.0	223
.9	.0	3.6	9.0	21.5	4.9	4.5	.9	.4	.4	53.8	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.9	.9	.9	.9	.9	.9	.9	.9
>5000	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
>3500	4.8	6.6	6.6	6.6	6.6	6.6	6.6	6.6
>2000	8.3	11.4	11.4	11.4	11.4	11.4	11.4	11.4
>1000	21.5	32.0	32.5	32.5	32.5	32.5	32.5	32.5
>600	25.9	39.9	42.1	42.1	42.1	42.1	42.1	42.1
>300	25.9	41.2	44.3	45.2	45.2	45.6	45.6	45.6
>150	25.9	41.2	44.3	45.2	45.2	45.6	45.6	45.6
>0	25.9	41.2	44.3	45.6	46.1	46.5	46.5	46.5
TOTAL	59	94	101	104	105	106	106	106

TOTAL NUMBER OF OBS: 228

PCT FREQ NH <5/8: 53.5

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
14.8	8.5	11.0	11.0	7.6	8.9	6.8	10.2	20.3	.8	236

PERIOD: (PRIMARY) 1907-1975
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.4	.0	.0	.0	.0	.4	.0	.0	.0	.8	
	TOT %	.0	.4	.0	.0	.0	.0	.4	.0	.0	.0	.8	
1<2	PCP	.4	.0	.0	.0	.4	.0	.4	.0	.0	.4	1.5	
	NO PCP	.0	.0	.0	.0	.7	.1	.0	.0	.0	.0	.8	
	TOT %	.4	.0	.0	.0	1.1	.1	.4	.0	.0	.4	2.3	
2<5	PCP	.8	.0	.0	.0	.3	.1	.8	.0	.0	.0	1.9	
	NO PCP	.3	.5	.0	.0	.4	.0	.0	.0	.0	.0	1.1	
	TOT %	1.1	.5	.0	.0	.7	.1	.8	.0	.0	.0	3.1	
5<10	PCP	3.0	.9	.0	.0	.4	.6	1.8	2.6	.0	.4	9.6	
	NO PCP	3.2	1.2	.6	.5	3.3	2.4	.9	3.7	.0	.4	16.1	
	TOT %	6.1	2.1	.6	.5	3.6	3.0	2.7	6.3	.0	.8	25.7	
10+	PCP	.0	.8	.0	.0	.4	1.1	.0	.4	.0	.0	2.7	
	NO PCP	10.2	2.5	3.0	2.9	21.2	8.0	9.8	5.0	.0	2.7	65.1	
	TOT %	10.2	3.3	3.0	2.9	21.6	9.1	9.8	5.4	.0	2.7	67.8	
TOT OBS													261
TOT PCT		17.8	6.2	3.5	3.4	26.9	12.3	14.0	12.1	.0	3.8	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.3	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	
	22+	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	
	TOT %	.0	.0	.0	.3	.0	.0	.0	.6	.0	.0	.9	
1/2<1	0-3	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	4-10	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.4	.0	.0	.0	.0	.3	.0	.0	.0	.9	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.3	
	4-10	.0	.0	.0	.0	.8	.1	.0	.0	.0	.0	.9	
	11-21	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3	
	22+	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	TOT %	.3	.0	.0	.0	.8	.1	.3	.0	.0	.3	1.8	
2<5	0-3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
	4-10	.0	.0	.0	.3	.3	.0	.0	.0	.0	.0	.6	
	11-21	1.4	.5	.0	.0	.3	.1	.4	.1	.0	.0	2.9	
	22+	.3	.0	.0	.0	.2	.1	.3	.0	.0	.0	.9	
	TOT %	1.7	.5	.0	.3	1.1	.2	.7	.1	.0	.0	4.7	
5<10	0-3	.4	.4	.0	.0	.0	.0	.0	.3	.0	.9	2.1	
	4-10	1.0	.5	.2	.4	1.8	1.7	.9	1.5	.0	.0	7.9	
	11-21	3.2	.5	.2	.3	1.8	1.1	.8	2.9	.0	.0	10.9	
	22+	1.2	.3	.0	.0	.3	.1	.7	.9	.0	.0	3.5	
	TOT %	5.9	1.8	.4	.7	3.9	2.9	2.3	5.6	.0	.9	24.3	
10+	0-3	.3	.1	.5	.3	.0	.4	.8	.3	.0	3.2	5.9	
	4-10	6.2	1.2	.7	1.6	7.5	6.0	2.9	2.1	.0	.0	28.2	
	11-21	2.3	.5	1.5	1.2	12.5	3.8	3.7	1.7	.0	.0	27.3	
	22+	.2	.9	.0	.0	2.3	.4	1.8	.4	.0	.0	6.2	
	TOT %	9.0	2.6	2.7	3.1	22.4	10.6	9.2	4.5	.0	3.2	67.4	
TOT OBS													341
TOT PCT		17.0	5.4	3.2	4.3	28.2	13.9	12.9	10.9	.0	4.4	100.0	

PERIOD: (PRIMARY) 1907-1975
(OVER-ALL) 1871-1975

APRIL

AREA 0027 VALDIVIA
40.35 74.5W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	2.1	.0	2.1	12.8	21.3	4.3	2.1	.0	.0	2.1	46.8	53.2	47
06009	.0	.0	7.0	7.0	14.0	1.8	8.8	.0	.0	.0	38.6	61.4	57
12015	1.5	.0	.0	7.6	24.2	4.5	6.1	.0	1.5	.0	45.5	54.5	66
18021	.0	.0	4.9	11.5	23.0	8.2	1.6	3.3	.0	.0	52.5	47.5	61
TOT	2	0	8	22	48	11	11	2	1	1	106	125	231
PCT	.9	.0	3.5	9.5	20.8	4.8	4.8	.9	.4	.4	45.9	54.1	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	1.4	1.4	.0	6.9	26.4	63.9	72
06009	.0	.0	2.8	4.6	22.2	70.4	108
12015	1.2	.0	1.2	2.4	26.5	68.7	83
18021	1.2	2.4	2.4	5.9	23.5	64.7	85
TOT	3	3	6	17	85	234	348
PCT	.9	.9	1.7	4.9	24.4	67.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOURL (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	2.2	4.3	17.4	30.4	52.2	46
06009	.0	7.3	14.5	25.5	60.0	55
12015	1.5	1.5	10.6	34.8	54.5	66
18021	.0	4.9	18.0	36.1	45.9	61
TOT	2	10	34	73	121	228
PCT	.9	4.4	14.9	32.0	53.1	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.0	.0	.4	1.2	.4	.0	5	2.0
60/64	.0	.0	.0	.0	1.2	5.5	3.6	2.0	31	12.3
55/59	.0	.0	.0	.0	4.0	14.2	23.7	15.0	144	56.9
50/54	.0	.0	.0	.0	5.5	5.5	11.5	4.7	69	27.3
45/49	.0	.0	.0	.0	.0	.4	.8	.0	3	1.2
40/44	.0	.0	.0	.0	.0	.0	.0	.4	1	.4
TOTAL	0	0	0	0	28	68	101	56	253	100.0
PCT	.0	.0	.0	.0	11.1	26.9	39.9	22.1		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	.0	.0	.0	.0	.4	.4	1.2	.0	.0	.0
60/64	3.0	.0	.0	.2	2.3	1.4	2.0	3.5	.0	.0
55/59	8.3	4.7	2.8	1.2	13.7	6.4	10.4	7.4	.0	2.0
50/54	4.4	2.0	.9	1.3	9.7	2.7	3.1	1.3	.0	2.0
45/49	.3	.1	.0	.0	.0	.8	.0	.0	.0	.0
40/44	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4
TOTAL	16.0	6.8	3.7	2.7	26.1	11.7	16.6	12.2	.0	4.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	66	63	61	55	50	48	47	55.5	342
06009	65	62	60	55	49	46	45	54.7	681
12015	65	63	61	55	50	46	43	55.2	329
18021	66	64	62	57	52	50	47	57.1	599
TOT	68	63	61	55	50	48	43	55.7	1951

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	7.5	26.4	37.7	28.3	84	53
06009	.0	.0	8.5	16.9	52.1	22.5	84	71
12015	.0	.0	14.1	23.9	36.6	25.4	82	71
18021	.0	.0	14.1	39.1	34.4	12.5	80	64
TOT	0	0	29	68	105	97	82	259

APRIL

PERIOD: (PRIMARY) 1907-1975
(OVER-ALL) 1871-1975

TABLE 17

AREA 0027 VALDIVIA
40.3S 74.5WPCT FRQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	TOT	N FOG	NO FOG
9/10	.0	.0	.0	.0	.4	.8	3	.0	1.2
7/8	.0	.0	.0	.0	.0	.4	1	.4	.0
5	.0	.0	.0	.8	.0	.4	3	.0	1.2
4	.0	.4	.0	.8	.4	.0	4	.0	1.6
3	.0	.0	.4	2.7	1.2	.0	11	.0	4.3
2	.0	.4	2.0	3.9	.8	.0	18	.0	7.1
1	.0	.8	3.5	5.5	.8	.4	28	.0	11.0
0	.0	.0	6.7	8.2	2.0	.0	43	1.2	15.7
-1	.0	1.2	8.6	4.3	.8	.0	38	.0	14.9
-2	.4	1.6	7.5	4.3	.8	.0	37	.4	14.1
-3	.0	3.9	5.1	1.6	.0	.0	27	.0	10.6
-4	.0	3.9	1.0	.8	.0	.0	16	.0	6.3
-5	.0	2.7	1.6	.4	.0	.0	12	.0	4.7
-6	.0	1.2	1.6	.0	.0	.0	7	.0	2.7
-7/-8	.0	.8	.4	.8	.0	.0	5	.0	2.0
-9/-10	.0	.0	.4	.0	.0	.0	2	.0	.8
TOTAL	1	43	100	88	18	5	255	5	250
PCT	.4	16.9	39.2	34.5	7.1	2.0	100.0	2.0	98.0

PERIOD: (OVER-ALL) 1963-1975

TABLE 18

PCT FRQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	2.0	.0	.0	.0	.0	2.0	.0	.2	.0	.0	.0	.0	.2
1-2	.0	.0	.0	.0	.0	.0	.0	.0	2.1	.0	.0	.0	.0	2.1
3-4	.0	2.1	.5	.0	.0	.0	2.7	.0	1.4	.2	.0	.0	.0	1.6
5-6	.0	2.9	2.3	1.3	.0	.0	6.4	.0	.0	1.3	.0	.0	.0	1.3
7	.0	.0	1.1	.0	.0	.0	1.1	.2	.0	.0	.7	.0	.0	.9
8-9	.0	.0	2.0	1.3	.0	.0	3.2	.0	.0	.2	1.4	.0	.0	1.6
10-11	.0	.0	.7	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	7.0	6.6	2.5	.0	.0	16.1	.2	3.8	1.6	2.1	.0	.0	7.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2
1-2	.0	.5	2.0	.0	.0	.0	2.5	.0	2.1	.4	.0	.0	.0	2.5
3-4	.0	.0	1.4	.0	.0	.0	1.4	.0	.0	.2	.0	.0	.0	.2
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.5	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.7	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.3	.5	3.4	.0	.0	.0	5.2	.0	2.3	.5	.0	.0	.0	2.9

AD-A064 027

NAVAL WEATHER SERVICE DETACHMENT ASHEVILLE N C
SUMMARY OF SYNOPTIC METEOROLOGICAL OBSERVATIONS (SSMO), SOUTH A--ETC(U)
FEB 79

F/G 4/2

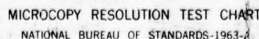
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PERIOD: (PRIMARY) 1907-1975
(OVER-ALL) 1871-1975

APRIL

AREA 0027 VALDIVIA
40.35 74.5W

TABLE 17

PCT FRQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	TOT	W FOG	WD FOG
9/10	.0	.0	.0	.0	.4	.8	3	.0	1.2
7/8	.0	.0	.0	.0	.0	.4	1	.4	.0
5	.0	.0	.0	.8	.0	.4	3	.0	1.2
4	.0	.4	.0	.8	.4	.0	4	.0	1.6
3	.0	.0	.4	2.7	1.2	.0	11	.0	4.3
2	.0	.4	2.0	3.9	.8	.0	18	.0	7.1
1	.0	.8	3.5	5.5	.8	.4	28	.0	11.0
0	.0	.0	6.7	8.2	2.0	.0	43	1.2	15.7
-1	.0	1.2	8.6	4.3	.8	.0	38	.0	14.9
-2	.4	1.6	7.5	4.3	.8	.0	37	.4	14.1
-3	.0	3.9	5.1	1.6	.0	.0	27	.0	10.6
-4	.0	3.9	1.6	.8	.0	.0	16	.0	6.3
-5	.0	2.7	1.6	.4	.0	.0	12	.0	4.7
-6	.0	1.2	1.6	.0	.0	.0	7	.0	2.7
-7/-8	.0	.8	.4	.8	.0	.0	5	.0	2.0
-9/-10	.0	.0	.4	.0	.0	.0	2	.0	.8
TOTAL	1	43	100	88	18	5	255	5	250
PCT	.4	16.9	39.2	34.5	7.1	2.0	100.0	2.0	98.0

PERIOD: (OVER-ALL) 1963-1975

TABLE 18

PCT FRQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	NE	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	2.0	.0	.0	.0	.0	2.0	.0	.2	.0	.0	.0	.0	.0	.2
1-2	.0	.0	.0	.0	.0	.0	.0	.0	2.1	.0	.0	.0	.0	.0	2.1
3-4	.0	2.1	.5	.0	.0	.0	2.7	.0	1.4	.2	.0	.0	.0	.0	1.6
5-6	.0	2.9	2.3	1.3	.0	.0	6.4	.0	.0	1.3	.0	.0	.0	.0	1.3
7	.0	.0	1.1	.0	.0	.0	1.1	.2	.0	.0	.7	.0	.0	.0	.9
8-9	.0	.0	2.0	1.3	.0	.0	3.2	.0	.0	.2	1.4	.0	.0	.0	1.6
10-11	.0	.0	.7	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	7.0	6.6	2.5	.0	.0	16.1	.2	3.8	1.6	2.1	.0	.0	.0	7.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	SE	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2
1-2	.0	.5	2.0	.0	.0	.0	2.5	.0	2.1	.4	.0	.0	.0	.0	2.5
3-4	.0	.0	1.4	.0	.0	.0	1.4	.0	.0	.2	.0	.0	.0	.0	.2
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.5	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.7	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.3	.5	3.4	.0	.0	.0	5.2	.0	2.3	.3	.0	.0	.0	.0	2.9

PERIOD: (OVER-ALL) 1963-1975

APRIL

AREA 0027 VALDIVIA
40.3S 74.5W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	3.4	.0	.0	.0	.0	3.4	.2	.0	.0	.0	.0	.0	.2
1-2	.0	5.9	.5	.0	.0	.0	6.4	.0	3.0	.0	.0	.0	.0	3.0
3-4	.0	.7	2.5	.0	.0	.0	3.2	.0	2.1	.5	.0	.0	.0	2.7
5-6	.0	1.8	2.0	2.1	.0	.0	5.9	.0	1.1	2.2	.0	.0	.0	1.3
7	.0	.0	3.6	.0	.0	.0	3.6	.0	.7	.0	.7	.0	.0	1.4
8-9	.0	.0	.7	.0	.0	.0	.7	.0	.0	.7	.0	.0	.0	.7
10-11	.0	.0	.7	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
12	.0	.7	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.7	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	12.5	10.7	2.1	.0	.0	25.4	.2	7.0	1.4	.7	.0	.0	9.3

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.5	2.1	.0	.0	.0	.0	2.7	.0	.7	.0	.0	.0	.0	.7	
1-2	.0	2.3	.7	.0	.0	.0	3.0	.0	1.1	.7	.0	.0	.0	1.8	
3-4	.0	.0	3.9	.0	.0	.0	3.9	.0	.7	1.4	.0	.0	.0	2.1	
5-6	.0	.0	1.3	.7	.0	.0	2.0	.7	.0	.2	.2	.0	.0	1.1	
7	.0	.0	1.4	1.3	.0	.0	2.7	.0	.7	.4	.2	.0	.0	1.3	
8-9	.0	.0	.5	1.3	.0	.0	1.8	.0	.0	.2	.4	.0	.0	.5	
10-11	.0	.0	.0	1.4	.0	.0	1.4	.0	.7	.0	.7	.0	.0	1.4	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.7	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.5	4.5	7.9	4.6	.0	.0	17.5	.7	3.9	2.9	2.1	.0	.0	9.6	93.6

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	6.4	8.6	.0	.0	.0	.0	15.0	
1-2	.0	17.1	4.3	.0	.0	.0	21.4	
3-4	.0	7.1	10.7	.0	.0	.0	17.9	
5-6	1.4	5.7	7.1	4.3	.0	.0	18.6	
7	.7	1.4	6.4	2.9	.0	.0	11.4	
8-9	.0	.0	4.3	4.3	.0	.0	8.6	
10-11	.0	.7	1.4	2.1	.0	.0	4.3	
12	.7	.7	.0	.0	.0	.0	1.4	
13-16	.0	.0	.7	.7	.0	.0	1.4	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	9.3	41.4	35.0	14.3	.0	.0	100.0	140

PERIOD: (OVER-ALL) 1952-1975

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.0	5.0	11.9	6.9	5.0	4.0	1.5	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	74	5
6-7	.0	1.0	1.5	10.4	4.0	3.0	1.0	1.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	45	6
8-9	.0	.0	2.5	.5	3.0	1.0	5.4	.5	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	29	9
10-11	.0	.0	.0	3.0	1.0	2.5	.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	17	8
12-13	.0	.0	.5	1.0	.5	.0	.5	1.5	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	9
>13	.0	.0	.0	.0	.5	.5	1.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	9
INDET	2.5	.0	1.0	1.0	2.0	3.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	23	6
TOTAL	9	12	35	46	32	28	23	11	2	4	.0	.0	.0	.0	.0	.0	.0	.0	.0	202	6
PCT	4.5	5.9	17.3	22.8	15.8	13.9	11.4	5.4	1.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1873-1977

MAY

AREA 0027 VALDIVIA
40.45 74.5W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	20.7	2.1	5.4	.0	.0	.0	.0	28.2	14.8	.0	5.0	.0	1.7	.0	49.4
NE	9.7	3.5	4.4	.0	.0	.0	.0	17.7	.0	.0	.0	.0	.0	.0	81.4
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	6.7	3.4	.0	.0	.0	.0	.0	10.1	.0	.0	.0	.0	.0	.0	89.9
S	.0	2.9	.0	.0	.0	.0	.0	2.9	.0	.0	.0	.0	.0	.0	97.1
SW	.0	.0	.0	.0	.0	.0	.0	.0	14.8	.0	.0	.0	.0	.0	85.2
W	18.5	3.4	3.4	.0	.0	.0	.0	25.2	18.5	.0	.0	.0	.0	.0	56.3
NW	13.4	8.7	4.7	.0	.0	.0	.0	26.8	4.7	.0	6.3	.0	.0	.0	62.2
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	33.3	.0	.0	.0	66.7
TOT	11.0	3.3	2.8	.0	.0	.0	.0	17.1	7.7	.0	2.4	.0	.4	.0	72.4
PCT															
TOT OBS:	246														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00603	12.7	5.5	1.8	.0	.0	.0	.0	20.0	3.5	.0	3.6	.0	.0	.0	70.9
06609	9.4	1.6	2.1	.0	.0	.0	.0	14.1	9.4	.0	4.7	.0	1.6	.0	70.3
12015	12.9	4.9	3.2	.0	.0	.0	.0	21.0	8.1	.0	.0	.0	.0	.0	71.0
18021	10.0	1.4	2.9	.0	.0	.0	.0	14.3	7.1	.0	1.4	.0	.0	.0	77.1
TOT PCT	11.2	3.2	2.8	.0	.0	.0	.0	17.1	7.6	.0	2.4	.0	.4	.0	72.5
TOT OBS:	251														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21
N	1.2	6.6	6.9	3.7	1.0	.2		19.8	15.7	18.2	60.0	21.4	19.9	21.4	14.3	20.2	16.9
NE	.6	3.1	2.2	.8	.3	.1		7.2	13.3	6.8	20.0	6.6	7.4	8.0	14.3	7.1	6.7
E	.5	2.3	.9	.1	.0	.0		3.7	8.3	3.1	.0	4.5	6.1	3.9	.0	3.2	1.9
SE	1.1	4.5	3.0	.5	.0	.0		9.1	10.1	10.0	.0	9.3	8.6	11.6	17.9	8.8	5.6
S	1.3	6.9	3.0	1.9	.3	.0		15.4	12.3	15.8	20.0	13.6	14.0	14.9	10.7	16.5	17.2
SW	1.1	4.2	4.0	1.5	.3	.0		11.1	13.2	9.8	.0	8.8	11.6	13.2	14.3	11.4	12.5
W	.8	5.1	5.1	1.4	.4	.3		13.1	14.3	15.3	.0	14.2	11.5	8.7	14.3	13.8	15.0
NW	.7	6.3	6.6	3.9	.8	.2		18.5	15.7	19.1	.0	19.6	17.9	16.2	14.3	17.6	21.1
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	2.1	.0	.0	.0	.0	.0		2.1	.0	1.9	.0	1.9	3.0	2.1	.0	1.3	3.0
TOT OBS	199	830	719	292	70	17	2127		13.4	366	5	363	301	340	7	449	296
TOT PCT	9.4	39.0	33.8	13.7	3.3	.8		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	06	12	18
N	3.7	7.7	5.8	2.1	.5	19.8	15.7	18.7	20.7	21.3	18.9	
NE	1.7	3.8	.8	.8	.1	7.2	13.3	7.0	7.0	8.1	6.9	
E	1.8	1.6	.3	.0	.0	3.7	8.3	3.0	5.3	3.8	2.7	
SE	3.4	3.9	1.7	.1	.0	9.1	10.1	9.9	9.0	11.7	7.5	
S	4.0	7.1	3.5	.7	.1	15.4	12.3	15.8	13.7	14.8	16.8	
SW	2.5	4.9	3.1	.6	.0	11.1	13.2	9.6	10.1	13.3	11.8	
W	3.0	5.6	3.5	.8	.3	13.1	14.3	15.1	13.0	8.8	14.3	
NW	2.8	7.8	5.8	1.6	.5	18.5	15.7	18.9	18.9	16.1	19.0	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	2.1	.0	.0	.0	.0	2.1	.0	1.9	2.4	2.0	2.0	
TOT OBS	331	899	517	146	34	2127		371	664	347	745	
TOT PCT	25.0	42.3	24.3	6.9	1.6	100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1873-1977

MAY

AREA 0027 VALDIVIA
40.45 74.5W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47					
0000Z	1.9	7.3	43.1	31.0	13.7	2.7		.3	12.9	100.0	371
0600Z	2.4	8.3	39.9	33.0	11.7	3.5		1.2	13.1	100.0	664
1200Z	2.0	6.9	39.5	35.7	11.5	3.5		.9	13.4	100.0	347
1800Z	2.0	6.4	36.0	35.0	16.5	3.4		.7	14.0	100.0	745
TOT	45	154	830	719	292	70		17	13.4		2127
PCT	2.1	7.2	39.0	33.8	13.7	3.3		.8	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.9	1.3	5.4	17.1		7.0
NE	1.2	.1	3.9	6.4		6.4
E	.4	.0	.9	.4		5.6
SE	2.7	2.2	1.4	3.1		4.6
S	6.7	2.0	4.7	3.0		4.0
SW	.1	1.2	3.0	2.7		6.4
W	.5	1.4	3.9	6.5		6.6
NW	2.1	1.2	2.9	9.3		6.4
VAR	.0	.0	.0	.0		.0
CALM	.5	.0	.5	.0		3.5
TOT OBS	29	18	51	93	191	6.0
TOT PCT	15.2	9.4	26.7	48.7	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	1.4	.0	1.4	7.2	5.9	2.5	.8	.0	.0	1.4	4.1	
NE	.1	.0	.7	1.6	.7	4.8	.0	.0	.0	.3	3.5	
E	.0	.0	.0	.0	.5	.0	.0	.0	.0	.4	.8	
SE	.0	.0	.5	2.1	.5	.8	.0	.0	.0	.5	5.1	
S	.0	.0	.0	.0	2.1	1.8	1.0	.0	.0	.0	11.4	
SW	.0	.0	.0	.5	2.2	1.0	.0	.0	.0	.0	3.3	
W	2.0	.0	.9	2.1	2.0	2.6	.0	.0	.0	.0	2.9	
NW	.1	.0	1.7	4.8	1.8	1.0	1.3	.0	.0	.0	4.6	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	
TOT OBS	7	0	10	35	30	28	6	0	0	5	70	191
TOT PCT	3.7	.0	5.2	18.3	15.7	14.7	3.1	.0	.0	2.6	36.6	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	2.1	2.6	2.6	2.6	2.6	2.6	2.6	2.6
= OR >5000	2.6	3.1	3.1	3.1	3.1	3.1	3.1	3.1
= OR >3500	4.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
= OR >2000	15.5	18.1	19.2	20.2	20.2	20.2	20.2	20.2
= OR >1000	27.5	32.6	34.2	35.8	35.8	35.8	35.8	35.8
= OR >600	33.7	44.6	48.7	50.8	52.3	53.9	53.9	53.9
= OR >300	35.2	48.2	54.4	56.5	58.0	59.6	59.6	59.6
= OR >150	35.2	48.2	54.4	56.5	58.0	59.6	59.6	59.6
= OR >0	35.2	48.2	56.5	59.1	61.1	62.7	63.2	63.2
TOTAL	68	93	109	114	118	121	122	122

TOTAL NUMBER OF OBS: 193

PCT FREQ NH <5/8: 36.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
	7.1	8.6	6.6	6.1	7.6	6.6	6.6	8.1	40.4	2.5	198

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1873-1977

MAY

AREA 0027 VALDIVIA
40.4S 74.5W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.8	.0	.0	.0	.0	.0	.0	.8	.0	.0	1.6	
	TOT %	.8	.0	.0	.0	.0	.0	.0	.8	.0	.0	1.6	
1/2<1	PCP	1.1	.0	.0	.0	.0	.0	.3	.2	.0	.0	1.6	
	NO PCP	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	
	TOT %	1.5	.0	.0	.0	.0	.0	.3	.2	.0	.0	2.0	
1<2	PCP	.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	.8	
	NO PCP	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	
	TOT %	1.9	.1	.0	.0	.0	.0	.0	.0	.0	.0	2.0	
2<5	PCP	1.0	.9	.0	.0	.0	.0	1.5	1.0	.0	.0	4.5	
	NO PCP	1.5	.1	.4	.4	.0	.0	.4	.0	.0	.0	2.9	
	TOT %	2.6	1.0	.4	.4	.0	.0	1.9	1.0	.0	.0	7.3	
5<10	PCP	3.5	1.0	.0	.0	.4	.0	.4	1.6	.0	.0	6.9	
	NO PCP	3.1	1.4	.0	.8	.4	.8	.8	2.4	.0	.0	9.8	
	TOT %	6.5	2.4	.0	.8	.8	.8	1.2	4.1	.0	.0	16.7	
10+	PCP	.6	.0	.0	1.2	.0	.0	.8	.6	.0	.0	3.3	
	NO PCP	10.6	8.0	5.2	9.7	13.2	5.4	7.9	6.2	.0	.8	66.9	
	TOT %	11.2	8.0	5.2	10.9	13.2	5.4	8.7	6.8	.0	.8	70.2	
TOT OBS													245
TOT PCT													100.0

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	11-21	.3	.0	.0	.0	.0	.0	.0	.3	.0		.6	
	22+	.0	.0	.0	.0	.0	.0	.0	.3	.0		.3	
	TOT %	.6	.0	.0	.0	.0	.0	.0	.6	.0	.0	1.2	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.3	.0	.0	.0	.0	.0	.2	.1	.0		.6	
	22+	.9	.0	.0	.0	.0	.0	.0	.1	.0		.9	
	TOT %	1.2	.0	.0	.0	.0	.0	.2	.2	.0	.0	1.5	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.6	.0	.0	.0	.0	.0	.0	.0	.0		.6	
	11-21	.9	.0	.0	.0	.0	.2	.2	.0	.0		1.2	
	22+	.4	.1	.0	.0	.0	.0	.0	.2	.0		.6	
	TOT %	1.9	.1	.0	.0	.0	.2	.2	.2	.0	.0	2.5	
2<5	0-3	.3	.0	.0	.0	.0	.0	.3	.0	.0	.0	.6	
	4-10	.3	.0	.2	.2	.0	.0	.0	.0	.0	.0	.6	
	11-21	.8	.1	.0	.0	.0	.0	.3	.4	.0		1.3	
	22+	.5	.7	.2	.2	.0	.0	.9	.4	.0		2.8	
	TOT %	1.9	.8	.3	.3	.0	.0	1.5	.8	.0	.0	5.6	
5<10	0-3	.3	.8	.2	.3	.0	.0	.3	.0	.0	.0	1.9	
	4-10	.6	.3	.0	.3	.3	.8	.0	1.3	.0		4.0	
	11-21	1.2	.1	.0	.0	.6	.0	.9	1.2	.0		4.0	
	22+	3.6	1.2	.0	.0	.0	.3	.0	.8	.0		5.9	
	TOT %	5.7	2.3	.2	.6	1.1	1.1	1.2	3.6	.0	.0	15.8	
10+	0-3	.9	.5	.2	1.4	1.3	.5	.9	.0	.0	1.2	6.8	
	4-10	3.0	2.0	3.3	3.6	7.4	2.7	2.2	2.6	.0		26.9	
	11-21	5.3	3.8	2.0	3.6	5.0	2.7	3.4	3.9	.0		29.7	
	22+	2.0	1.0	.0	1.3	3.4	.9	.9	.5	.0		9.9	
	TOT %	11.1	7.3	5.5	10.0	17.1	6.7	7.4	7.0	.0	1.2	73.4	
TOT OBS													323
TOT PCT													100.0

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1873-1977

MAY

AREA 0027 VALDIVIA
40.45 74.5W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET>NH >4/8) AND
OCCURRENCE OF NH <3/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <3/8 ANY HGT	TOTAL OBS
00603	7.7	.0	2.6	23.1	17.9	7.7	2.6	.0	.0	2.6	64.1	35.9	39
06609	4.8	.0	4.8	21.4	14.3	4.8	7.1	.0	.0	2.4	59.5	40.5	42
12615	1.8	.0	7.1	19.6	19.6	23.2	1.8	.0	.0	.0	73.2	26.8	56
18621	1.8	.0	7.0	10.5	10.5	17.5	1.8	1.8	.0	5.3	56.1	43.9	57
TOT	7	0	11	35	30	28	6	1	0	9	123	71	194
PCT	3.6	.0	5.7	18.0	15.5	14.4	3.1	.5	.0	2.6	62.4	36.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00603	.0	2.9	1.5	10.3	14.7	70.6	68
06609	3.1	1.0	2.1	4.2	19.8	69.8	96
12615	.0	.0	4.1	1.4	16.4	78.1	73
18621	1.1	2.2	2.2	7.7	11.0	75.8	91
TOT	4	5	8	19	51	241	328
PCT	1.2	1.5	2.4	5.8	15.5	73.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET>NH >4/8) BY HOUR

HOURL (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ ANDS+	NH <3/8 AND 5+	TOTAL OBS
00603	7.9	13.2	36.8	26.3	36.8	38
06609	4.8	16.7	31.0	28.6	40.5	42
12615	1.8	8.9	30.4	42.9	26.8	56
18621	1.8	12.3	26.3	29.8	43.9	57
TOT	7	24	59	63	71	193
PCT	3.6	12.4	30.6	32.6	36.8	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
60/64	.0	.0	.0	.0	.5	.0	.5	2.0	6	2.9
55/59	.0	.0	.5	.5	3.4	11.2	17.1	15.6	99	48.3
50/54	.0	.0	.0	1.0	9.8	9.3	13.7	5.9	81	39.5
45/49	.0	.0	.0	1.0	.0	.0	6.8	1.5	19	9.3
TOTAL	0	0	1	5	28	42	78	51	205	100.0
PCT	.0	.0	.5	2.4	13.7	20.5	38.0	24.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
1.7	.6	.4	.1	.0	.0	.0	.1	.0	.0	.0
15.7	4.0	.0	2.2	6.3	4.3	4.5	10.7	.0	.5	.5
7.9	4.1	3.2	7.2	7.8	1.0	6.0	1.8	.0	.5	.5
.5	.0	4.4	3.9	.0	.5	.0	.0	.0	.0	.0
25.9	8.8	7.9	13.4	14.1	5.7	10.5	12.7	.0	1.0	1.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00603	66	61	58	54	47	46	45	53.5	370
06609	64	61	59	53	47	45	44	52.9	664
12615	61	60	58	53	46	43	41	53.0	341
18621	65	62	59	55	48	46	43	54.3	691
TOT	66	61	59	54	47	45	41	53.5	2066

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00603	.0	2.0	16.3	20.4	34.7	26.5	82	49
06609	.0	5.7	11.3	13.2	35.8	34.0	84	53
12615	.0	2.0	12.2	24.5	38.8	22.4	82	49
18621	.0	1.7	13.8	24.1	41.4	19.0	82	58
TOT	0	6	28	43	79	53	82	209

MAY

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1873-1977

TABLE 17

AREA 0027 VALDIVIA
40.4S 74.5WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	TOT FOG	W FOG	NO FOG
11/13	.0	.0	.0	.0	.0	.5	1	.0	.5
7/8	.0	.0	.5	.0	.0	.0	1	.0	.5
5	.0	.0	1.0	1.0	1.0	.0	6	.0	2.9
4	.0	.0	1.0	4.4	.5	.0	12	.5	5.4
3	.0	.0	1.5	5.4	.0	.0	14	.0	6.9
2	.0	.5	2.9	5.9	.5	.0	20	.5	9.3
1	.0	.0	4.9	3.9	.0	.0	18	.5	8.3
0	.0	3.4	8.8	3.4	.0	.0	32	.5	15.2
-1	.0	3.9	10.3	2.9	.0	.0	35	.5	16.7
-2	.0	5.4	4.9	1.5	.0	.0	24	.5	11.3
-3	.0	2.0	4.9	.0	.0	.0	14	.0	6.9
-4	.5	3.4	.5	.0	.0	.0	9	.0	4.4
-5	1.0	3.9	1.0	.0	.0	.0	12	.0	5.9
-6	.0	1.0	.0	.0	.0	.0	2	.0	1.0
-7/-8	.0	.5	.0	.0	.0	.0	1	.0	.5
-9/-10	1.0	.5	.0	.0	.0	.0	3	.0	1.5
TOTAL	5	50	86	58	4	1	204	6	198
PCT	2.5	24.5	42.2	28.4	2.0	.5	100.0	2.9	97.1

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
41	.0	.0	.0	.0	.0	.0	.0	.8	.8	.8	.0	.0	.0	2.4
1-2	.6	.8	.0	.0	.0	.0	1.4	.2	.2	.0	.0	.0	.0	.4
3-4	.0	3.0	4.9	2.4	.0	.0	10.4	.0	.0	2.0	.8	.0	.0	2.8
5-6	.0	.8	3.0	2.0	.0	.0	5.9	.0	.8	.0	.4	.0	.0	1.2
7	.0	.0	3.5	1.2	.8	.0	5.5	.0	.0	1.0	.2	.0	.0	1.2
8-9	.0	.0	.6	3.5	.0	.0	4.1	.0	.0	.0	.6	.0	.0	.6
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.8
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.6	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.6	4.7	12.6	9.1	.8	.0	27.8	1.0	1.8	3.9	2.8	.0	.0	9.6

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
41	.0	.0	.0	.0	.0	.0	.0	2.6	.2	.0	.0	.0	.0	2.8
1-2	.0	1.4	.0	.0	.0	.0	1.4	.2	1.8	.0	.0	.0	.0	2.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	1.0	1.6	.0	.0	.0	2.6
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.8	.0	1.6
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	1.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.8	.0	.0	1.8
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.8
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.4	.0	.0	.0	.0	1.4	2.8	3.0	3.5	2.6	.8	.0	12.8

PERIOD: (OVER-ALL) 1963-1977

MAY

AREA 0077 VALDIVIA
40.45 74.5W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	1.4	.6	.0	.0	.0	.0	2.0	.0	.0	.0	.0	.0	.0	.0	
1-2	1.2	1.4	.0	.0	.0	.0	2.6	.2	.8	.0	.0	.0	.0	1.0	
3-4	.0	.6	.8	.0	.0	.0	1.4	.0	.8	.0	.8	.0	.0	1.6	
5-6	.0	1.6	2.2	.8	.0	.0	4.7	.0	.8	3.0	.8	.0	.0	4.7	
7	.0	1.6	.8	.6	.0	.0	3.0	.0	.8	.0	.0	.0	.0	.8	
8-9	.0	.0	.6	2.2	.0	.0	2.8	.0	.0	.0	.2	.0	.0	.2	
10-11	.0	.0	.8	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	2.6	5.9	5.3	3.7	.0	.0	17.5	.2	3.3	3.3	1.8	.0	.0	8.5	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.8	.8	.0	.0	.0	1.6	
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	.8	
3-4	.0	.8	.0	.0	.0	.0	.8	.0	.2	3.7	.0	.0	.0	3.9	
5-6	.0	.0	3.7	1.4	.0	.0	5.1	.0	.0	1.8	.2	.0	.0	2.0	
7	.0	.0	.6	.0	.0	.0	.6	.0	.8	.6	1.0	.0	.0	2.4	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.8	.2	.8	.0	.0	1.8	
10-11	.0	.0	.6	.8	.0	.0	1.4	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.8	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	.8	4.9	2.2	.0	.0	7.9	.0	3.5	7.3	2.8	.0	.0	13.6	99.2

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	6.5	2.4	1.6	.0	.0	.0	10.5	
1-2	2.4	7.3	.0	.0	.0	.0	9.7	
3-4	.0	6.5	12.9	4.0	.0	.0	23.4	
5-6	.0	4.0	14.5	5.6	.8	.0	25.0	
7	.0	3.2	6.5	4.0	.8	.0	14.5	
8-9	.0	.8	2.4	8.1	.0	.0	11.3	
10-11	.0	.0	1.6	2.4	.0	.0	4.0	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.8	.0	.0	.0	.8	
17-19	.0	.0	.0	.8	.0	.0	.8	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	8.9	24.2	40.3	25.0	1.6	.0	100.0	124

PERIOD: (OVER-ALL) 1952-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.9	6.5	4.5	8.4	3.9	3.2	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	45	4
6-7	.0	.0	1.3	9.7	1.9	5.8	5.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	38	7
8-9	.0	.6	.0	3.9	5.2	2.6	5.2	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	25	7
10-11	.0	.6	1.3	1.3	2.6	5.8	1.9	.6	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	23	8
12-13	.0	.0	.6	1.3	.0	.6	1.3	1.3	1.3	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	11	10
>13	.0	.0	.0	.0	1.3	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	8
INDET	2.6	.0	.6	.6	.6	.0	.0	.6	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	5
TOTAL	7	12	13	39	24	28	21	4	2	2	1	1	0	0	0	0	0	0	0	154	7
PCT	4.5	7.8	8.4	25.3	15.6	18.2	15.6	2.6	1.3	1.3	.6	.6	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1873-1977

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TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN CHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGD WD PCPN	FGD WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
N	16.0	3.7	6.3	.0	.0	.0	.0	28.0	14.8	2.1	10.6	.0	.0	.0	44.4
NE	33.3	.0	.0	.0	.0	.0	.0	33.3	8.8	.0	.0	.0	.0	.0	57.9
E	35.3	.0	.0	.0	.0	.0	.0	35.3	.0	.0	.0	.0	.0	.0	64.7
SE	3.8	.0	.0	.0	.0	.0	.0	3.8	15.4	.0	.0	.0	.0	.0	80.8
S	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SW	4.3	.0	8.5	.0	.0	.0	.0	12.8	8.5	.0	.0	.0	.0	.0	78.7
W	5.8	8.7	4.3	.0	.0	.0	.0	18.8	20.3	.0	4.3	.0	.0	.0	56.5
NW	18.2	10.0	4.5	.0	.0	.0	.0	32.7	11.8	.0	.9	.0	.0	.0	54.5
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	14.6	4.0	4.6	.0	.0	.0	.0	23.2	11.9	.7	4.0	.0	.0	.0	60.3
TOT OBS:	151														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN CHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGD WD PCPN	FGD WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00003	2.9	5.7	5.7	.0	.0	.0	.0	14.3	8.6	.0	2.9	.0	.0	.0	74.3
06009	23.7	.0	5.3	.0	.0	.0	.0	28.9	7.9	2.6	.0	.0	.0	.0	60.5
12015	22.5	5.0	2.5	.0	.0	.0	.0	30.0	17.5	.0	2.5	.0	.0	.0	50.0
18021	7.7	5.1	5.1	.0	.0	.0	.0	17.9	12.8	.0	10.3	.0	.0	.0	59.0
TOT PCT	14.5	3.9	4.6	.0	.0	.0	.0	23.0	11.8	.7	3.9	.0	.0	.0	60.5
TOT OBS:	152														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)								
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18	21		
N	1.0	4.8	6.2	4.8	1.9	.5	19.2	19.0		21.0	33.3	21.4	17.7	17.4	87.5	19.7	15.7		
NE	.8	3.3	2.2	.7	.3	*	7.3	12.1		7.2	33.3	9.8	6.9	5.4	.0	6.5	7.8		
E	.7	2.5	1.6	.1	.0	.0	4.8	9.0		3.6	.0	4.7	7.0	5.3	.0	4.9	3.1		
SE	.3	3.4	2.9	.9	.0	.1	7.6	12.8		5.5	.0	5.6	10.8	11.6	.0	5.9	6.4		
S	.5	5.1	3.7	1.2	.5	*	10.9	13.1		11.9	.0	9.5	8.1	12.2	.0	9.7	15.8		
SW	.5	4.0	4.8	3.1	.7	*	13.2	16.0		16.1	.0	12.4	11.7	10.5	.0	14.7	14.1		
W	.7	3.9	4.2	2.8	1.2	.1	13.0	17.2		13.3	33.3	10.9	15.0	13.5	.0	12.2	13.4		
NW	1.0	5.5	7.4	5.0	2.1	.7	21.8	19.1		18.6	.0	22.8	21.1	21.6	12.5	24.5	22.0		
VAR	.0	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0		
CALM	2.2	.0	.0	.0	.0	.0	2.2	.0		2.7	.0	2.9	1.7	2.3	.0	1.8	1.7		
TOT OBS	139	493	601	339	122	26	1820	15.9		291	3	311	295	301	4	383	232		
TOT PCT	7.6	37.6	33.0	18.6	6.7	1.4		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	06	12	18	21
N	2.8	5.6	6.4	3.2	1.1	19.2	19.0				21.2	19.6	18.4	18.2	
NE	2.6	2.7	1.4	.6	.1	7.3	12.1				7.5	8.4	5.3	7.0	
E	1.6	2.8	.4	.0	.0	4.8	9.0				3.6	5.9	5.2	4.2	
SE	1.5	3.9	1.6	.5	.1	7.6	12.8				5.4	8.1	11.5	6.1	
S	2.9	4.8	2.1	1.0	.1	10.9	13.1				11.8	8.8	12.0	12.0	
SW	2.1	5.4	3.9	1.6	.2	13.2	16.0				15.9	12.0	10.4	14.5	
W	2.1	4.8	3.6	1.8	.7	13.0	17.2				13.5	12.9	13.4	12.6	
NW	3.2	7.4	5.9	3.5	1.8	21.8	19.1				18.4	22.0	21.5	23.5	
VAR	.0	.0	.0	.0	.0	.0	.0				.0	.0	.0	.0	
CALM	2.2	.0	.0	.0	.0	2.2	.0				2.7	2.3	2.3	1.8	
TOT OBS	383	682	461	221	73	1820	15.9				294	606	305	615	
TOT PCT	21.0	37.5	25.3	12.1	4.0		100.0				100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1873-1977

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47					
0000Z	2.7	5.8	33.7	30.3	20.4	6.5	.7	15.5	100.0	294	
0600Z	2.3	5.3	33.0	33.7	17.2	6.4	2.1	15.7	100.0	606	
1200Z	2.3	3.9	34.1	32.5	19.7	6.6	1.0	16.0	100.0	305	
1800Z	1.8	6.2	30.9	34.0	18.7	7.2	1.3	16.1	100.0	615	
TOT	40	99	593	601	339	122	26	15.9		1820	
PCT	2.2	5.4	32.6	33.0	18.6	6.7	1.4		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	1.3	3.4	7.1	21.1		6.9
NE	.0	1.7	2.6	5.3		6.4
E	.8	.6	.8	.6		4.0
SE	.9	.8	.8	1.7		4.9
S	1.9	.6	3.4	.8		4.6
SW	.9	2.4	9.6	1.5		5.5
W	1.5	2.6	2.1	3.4		5.2
NH	.2	2.3	3.8	13.9		7.1
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	.0	.0		.0
TOT OBS	10	19	40	64	133	6.2
TOT PCT	7.5	14.3	30.1	48.1	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
3.0	1.3	2.8	5.5	11.5	.8	.0	.0	.0	.0	8.1	
.0	.2	.0	1.9	2.6	.8	.0	.0	.0	.0	4.1	
.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	2.1	
.0	.0	.0	.9	.9	.8	.0	.0	.0	.0	1.7	
.0	.0	.0	.8	1.5	.8	.0	.0	.0	.0	3.6	
.0	.0	.0	3.2	1.5	1.5	.8	.0	.0	.0	1.5	6.0
.0	.0	.0	2.8	2.1	.6	.0	.0	.0	.0	4.1	
.8	.0	.9	6.2	3.4	3.2	.0	.8	.0	.0	4.9	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
5	2	5	28	32	11	1	1	0	2	46	133
3.8	1.5	3.8	21.1	24.1	8.3	.8	.8	.0	1.5	34.6	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
= OR >4000	1.5	1.5	2.3	2.3	2.3	2.3	2.3	2.3
= OR >3500	1.5	1.5	2.3	3.1	3.1	3.1	3.1	3.1
= OR >2000	4.6	6.1	7.6	8.4	9.2	10.7	10.7	10.7
= OR >1000	15.3	24.4	27.5	30.5	32.8	34.4	34.4	34.4
= OR >600	24.4	40.5	48.1	51.1	54.2	55.7	55.7	55.7
= OR >300	24.4	42.7	51.1	55.0	58.0	59.5	59.5	59.5
= OR >150	24.4	43.5	52.7	56.5	59.5	61.1	61.1	61.1
= OR >0	24.4	44.3	55.0	60.3	63.4	64.9	64.9	64.9
TOTAL	32	58	72	79	83	85	85	85

TOTAL NUMBER OF OBS 131

PCT FREQ NH <5/8 35.1

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
5.1	3.7	5.9	11.0	9.6	8.8	10.3	6.6	36.8	2.2	136

PERIOD: (PRIMARY) 1907-1977
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	1.3	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	1.3	
1/2<1	PCP	1.8	.8	.0	.0	.0	.0	.0	.0	.0	.0	2.6	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	1.8	.8	.0	.0	.0	.0	.0	.0	.0	.0	2.6	
1<2	PCP	.7	.0	.0	.0	.0	.7	.5	.8	.0	.0	2.6	
	NO PCP	2.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	2.6	
	TOT %	2.6	.7	.0	.0	.0	.7	.5	.8	.0	.0	5.3	
2<5	PCP	1.8	.2	.5	.0	.0	.7	.5	1.7	.0	.0	5.3	
	NO PCP	3.0	.2	.0	.0	.0	.0	.5	1.7	.0	.0	5.3	
	TOT %	4.8	.3	.5	.0	.0	.7	1.0	3.3	.0	.0	10.6	
5<10	PCP	3.8	1.5	.5	.2	.0	.0	.5	1.5	.0	.0	7.9	
	NO PCP	7.0	1.0	.0	2.0	1.3	1.3	1.0	3.0	.0	.0	16.6	
	TOT %	10.8	2.5	.5	2.2	1.3	1.3	1.5	4.3	.0	.0	24.5	
10+	PCP	.7	.7	.0	.0	.0	.7	.7	.7	.0	.0	3.3	
	NO PCP	10.6	4.5	1.8	2.2	5.6	12.3	7.8	7.6	.0	.0	52.3	
	TOT %	11.3	5.1	1.8	2.2	5.6	12.9	8.4	8.3	.0	.0	55.6	
TOT OBS													191
TOT PCT													
		31.3	9.4	2.8	4.3	7.0	15.6	11.4	18.2	.0	.0	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.8	
	11-21	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.4	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.4	.8	.0	.0	1.2	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.7	.5	.0	.0	.0	.0	.0	.0	.0	.0	1.2	
	TOT %	1.1	.5	.0	.0	.0	.0	.0	.0	.0	.0	1.6	
1<2	0-3	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.4	
	4-10	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	
	11-21	.4	.0	.0	.0	.0	.0	.3	.1	.0	.0	.8	
	22+	1.0	.4	.0	.0	.0	.0	.6	.0	.0	.0	2.0	
	TOT %	1.8	.4	.0	.0	.0	.4	.3	.7	.0	.0	3.6	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4	
	4-10	.3	.0	.4	.0	.0	.4	.3	.2	.0	.0	1.6	
	11-21	1.4	.4	.5	.0	.0	.0	.3	1.4	.0	.0	4.0	
	22+	2.2	.0	.0	.0	.0	.0	.4	1.0	.0	.0	3.6	
	TOT %	3.9	.4	.9	.0	.0	.4	1.0	2.6	.0	.4	9.5	
5<10	0-3	.4	.0	.0	.0	.0	.0	.0	.0	.0	.8	1.2	
	4-10	2.0	.2	.5	.5	.0	.0	.3	.5	.0	.0	4.0	
	11-21	1.7	1.7	.4	.8	1.0	1.8	1.2	1.8	.0	.0	10.3	
	22+	6.3	.6	.0	.4	.4	1.2	.8	1.4	.0	.0	11.1	
	TOT %	10.4	2.5	.9	1.7	1.4	3.0	2.3	3.7	.0	.8	26.6	
10+	0-3	.4	.8	.4	.0	.9	.3	.0	.0	.0	1.6	4.4	
	4-10	4.4	.7	1.1	1.1	2.5	3.2	2.4	3.4	.0	.0	18.7	
	11-21	3.6	1.6	.0	.4	3.0	4.9	1.8	3.9	.0	.0	19.0	
	22+	4.2	1.0	.0	.0	.0	4.2	2.9	3.3	.0	.0	15.5	
	TOT %	12.5	4.1	1.5	1.5	6.3	12.5	7.0	10.5	.0	1.6	57.5	
TOT OBS													252
TOT PCT													
		29.7	7.8	3.3	3.2	7.7	16.3	11.0	18.3	.0	2.8	100.0	

PERIOD: (PRIMARY) 1907-1977
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HR	000	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
(GMT)	149	299	599	999	1999	3499	4999	6499	7999				
00003	3.4	.0	6.9	6.9	31.0	10.3	.0	3.4	.0	3.4	65.5	34.5	29
06009	.0	.0	3.1	28.1	18.8	3.1	.0	.0	.0	.0	53.1	46.9	32
12015	2.9	5.7	2.9	14.3	31.4	5.7	.0	.0	.0	.0	62.9	37.1	35
18021	7.7	.0	2.6	31.1	15.4	12.8	2.6	.0	.0	2.6	74.4	25.6	39
TOT	5	2	5	28	32	11	1	1	0	2	87	48	135
PCT	3.7	1.5	3.7	20.7	23.7	8.1	.7	.7	.0	1.5	64.4	35.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NH) BY HOUR

HR	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL
(GMT)							OBS
00003	.0	2.0	2.0	2.0	28.0	66.0	50
06009	1.2	1.2	.0	7.1	34.1	56.5	85
12015	3.5	.0	5.3	15.8	21.1	54.4	57
18021	.0	3.3	8.2	13.1	19.7	55.7	61
TOT	3	4	9	24	67	146	253
PCT	1.2	1.6	3.6	9.5	26.5	57.7	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NH) AND/OR
CEILING HGT (FEET, NH >4/8) BY HOUR

HR	<150	<600	<1000	1000+	NH <5/8	TOTAL
(GMT)	<30YD	<1	<5	AND 5+	AND 5+	OBS
00003	3.6	14.3	28.6	35.7	35.7	28
06009	.0	9.4	37.5	15.6	46.9	32
12015	3.1	15.6	37.5	28.1	34.4	32
18021	7.7	15.4	56.4	20.5	23.1	39
TOT	5	18	54	32	45	131
PCT	3.8	13.7	41.2	24.4	34.4	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL	PCT
									OBS	FREQ
60/64	.0	.0	.0	.0	.0	.0	.7	.7	2	1.3
59/59	.0	.0	.0	.0	1.3	4.0	5.3	15.3	39	26.0
50/54	.0	.0	.0	1.3	2.7	16.0	17.3	14.0	77	51.3
45/49	.0	.0	.0	.7	2.0	7.3	6.7	3.3	30	20.0
40/44	.0	.0	.0	.0	.0	.0	.7	.7	2	1.3
TOTAL	0	0	0	3	9	41	46	31	150	100.0
PCT	.0	.0	.0	2.0	6.0	27.3	30.7	34.0		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
60/64	.0	.0	.0	.0	.0	.7	.0	.7	.0	.0
59/59	10.7	4.3	.0	.7	.7	.0	1.0	8.7	.0	.0
50/54	18.7	3.3	2.3	.8	4.0	8.5	5.0	8.7	.0	.0
45/49	1.3	2.0	1.2	2.2	1.2	4.3	6.3	1.5	.0	.0
40/44	.0	.0	.0	.7	.7	.0	.0	.0	.0	.0
TOTAL	30.7	9.7	3.5	4.3	6.5	13.5	12.3	19.5	.0	.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL
(GMT)									OBS
00003	60	58	57	51	46	42	40	50.9	294
06009	61	58	56	51	45	42	38	50.4	610
12015	59	58	56	51	45	42	40	50.8	300
18021	61	59	57	52	46	43	42	52.1	589
TOT	61	58	57	51	46	43	38	51.2	1793

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL
(GMT)										OBS
00003	.0	2.9	8.6	28.6	37.1	22.9	82	35		
06009	.0	2.6	5.3	21.1	26.3	44.7	85	38		
12015	.0	.0	2.6	28.2	30.8	38.5	85	39		
18021	.0	2.6	7.7	30.8	30.8	28.2	82	39		
TOT	0	3	9	41	47	51	84	151		

PERIOD: (PRIMARY) 1907-1977
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41 44	45 48	49 52	53 56	57 60	61 64	TOT FOG	N FOG	WD FOG
11/13	.0	.0	.0	.0	.0	.8	1	.0	.8
9/10	.0	.0	.0	.0	.8	.0	1	.0	.8
7/8	.0	.0	.8	.8	.0	.0	2	.0	1.5
5	.0	.0	.0	.0	1.5	.0	2	.8	.8
4	.0	.8	.0	1.5	1.5	.0	5	.0	3.8
3	.0	.8	.0	2.3	6.0	.0	12	.0	9.0
2	.0	.8	.0	4.5	.0	.0	7	1.5	3.8
1	.0	.0	.8	5.3	.0	.0	8	.0	6.0
0	.0	.0	3.8	9.8	1.5	.0	20	2.3	12.8
-1	.0	.0	8.3	4.5	.0	.0	17	.0	12.8
-2	.0	1.5	6.8	3.0	.0	.0	15	.0	11.3
-3	.0	1.5	6.0	1.5	.8	.0	13	.0	9.8
-4	.0	2.3	5.3	4.5	.0	.0	16	.0	12.0
-5	.0	1.5	2.3	.0	.0	.0	5	.0	3.8
-6	.0	1.5	1.5	.0	.0	.0	4	.0	3.0
-7/-8	1.5	.8	.8	.0	.0	.0	4	.0	3.0
-9/-10	.0	.8	.0	.0	.0	.0	1	.0	.8
TOTAL	2		48		16		133	6	127
PCT	1.5	12.0	36.1	37.6	12.0	.8	100.0	4.5	95.5

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							PCT	NE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
41	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	1.3	2.6	.0	.0	.0	.0	3.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	1.0	3.6	.0	.0	.0	4.5	.0	.0	1.6	.0	.0	.0	.0	1.6	.0
5-6	.0	.0	1.9	.0	.0	.0	1.9	.0	.0	2.6	.0	.0	.0	.0	2.6	.0
7	.0	.0	3.2	3.2	.0	.0	6.5	1.3	.0	1.3	.6	.0	.0	.0	3.2	.0
8-9	.0	.0	.0	6.5	.0	.0	6.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	2.6	1.3	.0	3.9	.0	.0	.0	.0	.0	2.6	.0	2.6	.0
12	.0	.0	.0	1.3	1.3	.0	2.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.3	3.6	8.8	13.6	2.6	.0	29.9	1.3	.0	5.3	.6	2.6	.0	.0	10.1	

HGT	E							PCT	SE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
41	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	1.0	.0	.0	.0	.0	.0	1.0	.0	.6	.0	.0	.0	.0	.0	.6
3-4	.0	.0	1.0	.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	1.3	.0	.0	2.6	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.3	1.0	1.0	.0	.0	.0	3.2	.0	.6	1.3	1.3	.0	.0	.0	3.2	

PERIOD: (OVER-ALL) 1963-1977

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TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	2.3	.0	.0	.0	.0	2.3	2.6	.0	.0	.0	.0	.0	2.6
3-4	.0	.0	.0	.0	.0	.0	.0	.0	2.6	.0	.0	.0	.0	2.6
5-6	1.0	.0	1.0	.0	.0	.0	1.9	.3	.0	1.6	.0	.0	.0	1.9
7	1.0	.0	.0	.0	.0	.0	1.0	.3	.0	.0	5.2	.0	.0	5.5
8-9	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	.0	.0	1.3
10-11	.0	.0	2.3	.0	.0	.0	2.3	.0	.0	.3	.0	.0	.0	.3
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.9	2.3	3.2	.0	.0	.0	7.5	3.2	3.9	1.9	5.2	.0	.0	14.3

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	2.6	.0	.0	.0	.0	2.6	.0
3-4	.0	1.0	1.0	.0	.0	.0	2.9	.0	.0	3.6	.0	.0	.0	4.2	.0
5-6	.0	.0	1.0	1.9	.0	.0	2.9	.0	.0	6.2	.6	.0	.0	6.8	.0
7	.0	.0	.0	.0	.0	.0	1.0	.0	.0	2.3	2.6	.0	.0	4.9	.0
8-9	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	1.3	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.2	.0	.0	5.2	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.0	3.9	1.9	.0	.0	6.8	.0	3.2	12.0	9.7	.0	.0	25.0	100.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	1.3	.0	.0	.0	.0	.0	1.3	
1-2	3.9	9.1	.0	.0	.0	.0	13.0	
3-4	.0	5.2	11.7	.0	.0	.0	16.9	
5-6	1.3	.0	15.6	3.9	.0	.0	20.8	
7	2.6	.0	7.8	11.7	.0	.0	22.1	
8-9	.0	1.3	.0	7.8	.0	.0	9.1	
10-11	.0	.0	2.6	7.8	3.9	.0	14.3	
12	.0	.0	.0	1.3	1.3	.0	2.6	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	9.1	15.6	37.7	32.5	5.2	.0	100.0	77

PERIOD: (OVER-ALL) 1952-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.0	4.3	4.3	1.7	4.3	2.6	.9	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	22
6-7	.0	4.3	3.5	1.7	6.1	6.1	1.7	4.3	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	34
8-9	.0	.0	1.7	1.7	.9	2.6	4.3	3.5	2.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	20
10-11	.0	.0	.0	.9	.9	.9	8.7	6.1	2.6	.0	.9	.0	.9	.0	.0	.0	.0	.0	.0	.0	25
12-13	.0	.0	.9	.0	.0	1.7	.9	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5
>13	.0	.0	.0	.0	2.6	.9	.9	.0	.0	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	7
INDET	.9	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2
TOTAL	1	10	12	7	17	17	20	17	9	3	1	0	1	0	0	0	0	0	0	0	115
PCT	.9	8.7	10.4	6.1	14.8	14.8	17.4	14.8	7.8	2.6	.9	.0	.9	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1907-1976
(OVER-ALL) 1871-1976

JULY

AREA 0027 VALDIVIA
40.35 74.5W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWK	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	29.5	1.1	3.8	.0	.0	.0	.0	34.4	7.7	1.6	4.4	.0	2.2	.0	49.7
NE	11.1	3.7	14.8	.0	.0	.0	.0	29.6	9.3	.0	.0	.0	.0	.0	61.1
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.0	.0	.0	.0	.0	.0	.0	6.1	.0	.0	.0	.0	.0	93.9
S	3.6	.0	.0	.0	.0	.0	.0	3.6	3.6	2.7	.0	.0	.0	.0	90.2
SW	1.7	5.1	.0	.0	.0	.0	.0	6.8	.0	1.7	.0	.0	.0	.0	91.5
W	6.9	5.6	.0	.0	.0	.0	.0	12.5	4.9	2.1	2.1	.0	.0	.0	78.5
NW	19.7	.5	9.0	.0	.0	.0	.0	29.3	5.3	3.2	.5	.0	.0	.0	51.7
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	40.0	.0	.0	.0	60.0
TOT PCT	12.8	1.8	3.7	.0	.0	.0	.0	18.3	9.0	1.8	2.3	.0	.5	.0	72.0
TOT OBS:	218														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWK	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00003	16.7	1.7	1.7	.0	.0	.0	.0	20.0	1.7	1.7	1.7	.0	1.7	.0	73.3
06009	13.5	3.8	3.8	.0	.0	.0	.0	21.2	3.8	3.8	3.8	.0	.0	.0	67.3
12015	8.8	1.8	3.5	.0	.0	.0	.0	14.0	8.8	.0	.0	.0	.0	.0	77.2
18021	11.3	1.9	5.7	.0	.0	.0	.0	18.9	5.7	1.9	3.8	.0	.0	.0	69.8
TOT PCT	12.6	2.3	3.6	.0	.0	.0	.0	18.5	9.0	1.8	2.3	.0	.5	.0	72.1
TOT OBS:	222														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.8	4.6	5.7	4.0	1.1	.2		16.5	17.5	16.4	16.7	17.5	15.7	16.3	50.0	17.2	15.0	
NE	.5	2.5	2.0	.8	.2	*		6.1	13.5	4.3	.0	6.0	7.5	8.3	16.7	6.3	3.4	
E	.8	2.1	1.8	.3	.1	.0		5.1	10.8	5.6	.0	6.5	4.4	6.8	.0	3.5	3.9	
SE	.5	3.9	3.2	.6	*	.0		8.2	11.5	6.3	.0	8.8	9.4	7.5	.0	9.9	6.6	
S	1.1	5.3	4.8	1.6	.3	.2		13.1	13.5	14.5	.0	11.0	11.9	12.8	.0	13.8	15.2	
SW	1.2	4.8	4.1	1.6	.4	.2		12.3	13.7	12.5	.0	11.8	11.9	12.4	.0	13.4	11.6	
W	.7	3.6	5.3	3.9	.7	.1		14.3	17.2	13.5	.0	12.4	13.0	13.0	33.3	15.7	18.4	
NW	.0	5.7	8.3	5.8	1.5	*		22.0	17.8	24.9	83.3	21.5	21.5	21.4	.0	18.6	25.3	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	2.5							2.5	.0	2.1	.0	4.5	4.7	1.5	.0	1.7	.7	
TOT OBS	175	451	706	374	86	15	2007		15.0	339	3	335	300	337	3	423	267	
TOT PCT	8.7	32.4	35.2	18.6	4.3	.7		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+						00	03	06	18
N	2.4	5.5	5.3	2.7	.5			16.5	17.5	16.4	16.7	16.6	16.3	
NE	1.5	2.4	1.7	.4	.1			6.1	13.5	4.2	6.7	8.4	5.2	
E	1.5	2.6	.8	.1	*			5.1	10.8	5.6	5.5	6.7	3.7	
SE	1.9	4.3	1.8	.1	*			8.2	11.5	6.3	9.1	7.4	8.6	
S	2.9	6.2	2.8	1.0	.3			13.1	13.5	14.3	11.4	12.7	14.3	
SW	3.0	5.7	2.3	1.0	.4			12.3	13.7	12.4	11.9	12.3	12.7	
W	1.7	5.5	5.0	1.8	.3			14.3	17.2	13.4	12.7	13.2	16.7	
NW	2.4	7.7	7.7	3.9	.4			22.0	17.8	25.4	21.5	21.3	21.2	
VAR	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	
CALM	2.5							2.5	.0	2.0	4.6	1.5	1.3	
TOT OBS	398	798	550	221	40	2007			15.0	342	635	340	690	
TOT PCT	19.8	39.8	27.4	11.0	2.0			100.0		100.0	100.0	100.0	100.0	

JULY

PERIOD: (PRIMARY) 1907-1976
(OVER-ALL) 1871-1976

TABLE 4

AREA 0027 VALDIVIA
40.35 74.5W

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	2.0	7.3	32.2	33.6	20.2	4.4	.3	15.1	100.0	342
0600Z	4.6	6.0	32.1	36.4	17.0	3.0	.9	14.3	100.0	635
1201Z	1.5	6.8	36.5	33.2	17.1	3.8	1.2	14.8	100.0	340
1802Z	1.3	5.7	30.9	35.8	20.1	5.7	.6	15.8	100.0	690
TOT	50	125	631	706	374	86	15	15.0		2007
PCT	2.5	6.2	32.4	35.2	18.6	4.3	.7		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	2.2	1.6	2.3	12.2		6.5
NE	.0	.0	1.3	4.0		7.7
E	2.2	1.0	1.8	.9		4.4
SE	3.2	2.7	.5	2.1		3.4
S	3.9	2.5	4.7	2.2		4.3
SW	1.2	2.2	2.7	1.3		4.6
W	2.2	4.9	6.0	4.3		5.1
NW	1.7	2.2	7.6	11.4		6.4
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	.5	.5		7.5
TOT OBS	32	33	53	75	193	5.5
TOT PCT	16.6	17.1	27.5	38.9	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NM >4/8)
AND OCCURRENCE OF NM <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	5500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	1.6	.0	.0	4.3	4.4	1.3	.0	.0	.0	.0	6.7	
NE	.0	.0	.0	1.9	.6	1.0	.5	.0	.0	.0	1.2	
E	.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0	4.9	
SE	.0	.0	.0	.5	.5	1.0	.0	.0	.0	.0	6.5	
S	.0	.0	.5	.0	3.0	1.4	.4	.0	.0	.4	7.5	
SW	.0	.0	.0	.3	.8	1.3	.1	.0	.0	.1	4.8	
W	.4	.0	.4	1.3	5.1	1.7	.0	.0	.0	.0	8.5	
NW	.6	1.6	.6	2.1	5.8	3.6	.0	.0	.0	.0	8.5	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	
TOT OBS	6	3	3	20	41	22	2	0	0	1	95	193
TOT PCT	3.1	1.6	1.6	10.4	21.2	11.4	1.0	.0	.0	.5	49.2	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NM >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.5	.5	.5	.5	.5	.5	.5	.5
= OR >5000	.5	.5	.5	.5	.5	.5	.5	.5
= OR >3500	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
= OR >2000	7.7	11.8	12.3	12.3	12.3	12.8	12.8	12.8
= OR >1000	22.6	30.8	33.3	33.3	33.3	33.8	33.8	33.8
= OR >600	26.7	37.4	42.6	43.6	43.6	44.1	44.1	44.1
= OR >300	27.7	38.3	44.1	45.1	45.1	45.6	45.6	45.6
= OR >150	27.7	40.0	45.6	46.7	46.7	47.2	47.2	47.2
= OR >0	27.7	40.5	47.7	48.7	49.2	50.3	50.3	50.3
TOTAL	54	79	93	95	96	98	98	98

TOTAL NUMBER OF OBS: 195

PCT FREQ NH <5/8: 49.7

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8 OBS	TOTAL OBS
	11.3	8.3	6.9	11.3	11.3	8.3	6.4	6.4	27.0	204

PERIOD: (PRIMARY) 1907-1976
(OVER-ALL) 1871-1976

JULY

AREA 0027 VALDIVIA
40.35 74.5W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.5	
	NO PCP	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	
	TOT %	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	.9	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.3	.1	.0	.0	.0	.5	
	TOT %	.0	.0	.0	.0	.0	.3	.1	.0	.0	.0	.5	
1<2	PCP	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.5	
	NO PCP	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.5	
	TOT %	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.9	
2<5	PCP	2.2	.5	.0	.0	.0	.0	.7	.8	.0	.0	4.1	
	NO PCP	2.2	.6	.0	.0	.0	.1	.3	.5	.0	.9	4.6	
	TOT %	4.4	1.0	.0	.0	.0	.1	1.0	1.3	.0	.9	8.6	
5<10	PCP	3.0	.7	.0	.0	.0	.1	.8	4.1	.0	.0	8.8	
	NO PCP	3.5	.5	.0	.0	.0	.1	1.0	4.3	.0	.5	9.7	
	TOT %	6.5	1.2	.0	.0	.0	.1	1.8	8.4	.0	.5	18.4	
10+	PCP	1.8	.0	.0	.0	.5	.3	.6	1.4	.0	.0	4.6	
	NO PCP	7.4	3.2	5.3	7.6	12.1	6.1	12.8	10.5	.0	.9	65.9	
	TOT %	9.2	3.2	5.3	7.6	12.6	6.5	13.4	11.9	.0	.9	70.5	
TOT OBS													217
TOT PCT		21.1	6.2	5.3	7.6	12.6	6.7	16.6	21.7	.0	2.3	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.7	
	TOT %	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.7	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.3	.1	.0	.0	.0	.3	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.3	.1	.0	.0	.0	.3	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.2	.0	.0	.0	.0	.0	.2	.3	.0	.0	.7	
	22+	.4	.3	.0	.0	.0	.0	.2	.5	.0	.0	1.4	
	TOT %	.6	.3	.0	.0	.0	.0	.3	.8	.0	.0	2.0	
2<5	0-3	.2	.0	.0	.0	.0	.0	.0	.5	.0	.7	1.4	
	4-10	.7	.0	.0	.0	.0	.0	.3	.1	.0	.0	1.0	
	11-21	2.2	.4	.0	.0	.0	.0	.3	.5	.0	.0	3.4	
	22+	2.4	.5	.0	.0	.0	.1	.3	.8	.0	.0	4.1	
	TOT %	5.4	.9	.0	.0	.0	.1	.8	1.9	.0	.7	9.8	
5<10	0-3	.5	.0	.3	.0	.0	.0	.2	.0	.3	.3	1.4	
	4-10	1.0	.3	.0	.0	.0	.1	.5	.1	.0	.0	2.0	
	11-21	1.7	.0	.0	.0	.0	.0	.7	1.7	.0	.0	4.1	
	22+	3.7	.7	.0	.0	.0	.0	1.2	4.9	.0	.0	10.5	
	TOT %	6.9	1.0	.3	.0	.0	.1	2.4	6.8	.0	.3	17.9	
10+	0-3	.4	.4	.8	.4	.3	.8	.0	.3	.0	.7	4.1	
	4-10	4.1	2.1	2.4	3.5	4.9	3.2	4.7	2.4	.0	.0	27.4	
	11-21	2.7	1.4	1.3	3.4	5.3	1.9	3.1	4.0	.0	.0	23.0	
	22+	2.2	.5	.3	.7	2.8	1.3	.3	3.8	.0	.0	14.9	
	TOT %	9.5	4.4	4.7	7.9	13.3	7.1	11.1	10.6	.0	.7	69.3	
TOT OBS													296
TOT PCT		22.7	6.9	5.1	7.9	13.3	7.3	14.9	20.3	.0	1.7	100.0	

PERIOD: (PRIMARY) 1907-1976
(OVER-ALL) 1871-1976

JULY

AREA 0027 VALDIVIA
40.35 74.5W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <3/8 ANY MGT	TOTAL OBS
00003	1.9	.0	3.8	9.6	21.2	11.5	1.9	.0	.0	.0	50.0	50.0	52
06009	2.3	2.3	2.3	6.8	29.5	6.8	.0	.0	.0	.0	50.0	50.0	44
12015	.0	1.9	.0	13.5	11.5	13.5	.0	.0	.0	1.9	42.3	57.7	52
18021	8.0	2.0	.0	10.0	22.0	12.0	2.0	.0	.0	.0	56.0	44.0	50
TOT	6	3	3	20	41	22	2	0	0	1	98	100	198
PCT	3.0	1.5	1.5	10.1	20.7	11.1	1.0	.0	.0	.5	49.5	50.5	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	2.7	8.1	20.3	68.9	74
06009	.0	.0	.0	9.2	14.5	76.3	76
12015	1.4	.0	.0	8.7	15.9	73.9	69
18021	1.2	1.2	4.9	13.6	19.8	59.3	81
TOT	2	1	6	30	54	208	300
PCT	.7	.3	2.0	10.0	17.7	69.3	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <3/8 AND 5+	TOTAL OBS
00003	2.0	5.9	19.6	31.4	49.0	51
06009	2.3	7.0	16.3	34.9	48.8	43
12015	.0	3.9	21.6	25.5	52.9	51
18021	8.0	10.0	26.0	32.0	42.0	50
TOT	6	13	41	60	94	195
PCT	3.1	6.7	21.0	30.8	48.2	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
55/59	.0	.0	.0	1.0	.0	3.8	4.3	1.0	21	10.1
50/54	.0	.0	.5	1.9	7.2	13.5	18.8	14.4	117	56.3
45/49	.0	.0	.5	2.9	5.3	10.6	8.7	1.9	62	29.8
40/44	.0	.0	.0	.0	1.4	1.4	.5	.0	7	3.4
35/39	.0	.0	.0	.0	.0	.0	.5	.0	1	.5
TOTAL	0	0	2	12	29	61	68	36	208	100.0
PCT	.0	.0	1.0	5.8	13.9	29.3	32.7	17.3		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
1.7	.7	.0	.0	.4	.8	2.0	4.4	.0	.0	.0
14.9	3.6	2.9	2.6	4.4	3.8	9.4	13.1	.0	1.4	.0
2.2	1.4	2.3	4.1	7.3	2.0	5.8	3.7	.0	1.0	.0
.4	.1	.8	1.1	.5	.1	.4	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0
19.1	5.9	6.0	7.8	12.6	6.9	17.5	21.8	.0	2.4	.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	58	57	55	50	44	43	41	50.2	340
06009	58	57	55	50	44	42	39	49.5	637
12015	58	57	55	49	44	39	37	49.4	338
18021	61	57	55	51	46	43	41	50.9	677
TOT	61	57	55	50	44	42	37	50.1	1992

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	5.2	12.1	37.9	34.5	10.3	79	58
06009	.0	8.2	14.3	28.6	26.5	22.4	79	49
12015	.0	3.4	15.5	25.9	37.9	17.2	80	58
18021	.0	10.6	17.0	21.3	29.8	21.3	79	47
TOT	0	14	31	61	69	37	79	212

JULY

PERIOD: (PRIMARY) 1907-1976
(OVER-ALL) 1871-1976

TABLE 17

AREA 0027 VALDIVIA
40.35 74.5WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	27 40	41 44	43 48	49 52	53 56	57 60	TOT	N FOG	WD FOG
7/8	.0	.0	.0	.0	.5	.0	1	.0	.5
5	.0	.0	.0	.0	.0	2.0	4	.0	2.0
4	.0	.0	.0	.0	1.0	.5	3	.0	1.5
3	.0	.0	.0	.0	3.9	1.0	10	.0	4.9
2	.0	.0	.0	2.0	3.9	.0	12	.0	5.9
1	.0	.0	.0	2.9	3.9	.5	15	.0	7.3
0	.0	.0	.0	6.3	4.4	.5	23	.0	11.2
-1	.0	.0	1.0	9.8	2.9	.0	28	.5	13.2
-2	.0	.0	1.5	8.8	2.4	.0	26	1.0	11.7
-3	.0	.0	3.4	6.3	1.5	.0	23	.5	10.7
-4	.0	.0	5.9	3.4	1.5	.0	22	.5	10.2
-5	.0	.5	4.9	2.0	.5	.0	16	.0	7.8
-6	.0	.5	3.9	.5	.0	.0	10	.0	4.9
-7/-8	.0	2.4	1.5	.5	.0	.0	9	.0	4.4
-9/-10	.0	.0	.5	.0	.0	.0	1	.0	.5
-11/-12	.5	.0	.5	.0	.0	.0	2	.0	1.0
TOTAL	1	7	47	87	54	9	205	5	200
PCT	.5	3.4	22.9	42.4	26.3	4.4	100.0	2.4	97.6

PERIOD: (OVER-ALL) 1963-1976

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	1.9	.0	.0	.0	.0	1.9	.0	.2	.0	.0	.0	.0	.2
3-4	.0	1.9	.0	.0	.0	.0	1.9	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	2.4	1.9	.0	.0	4.3	.0	.0	.2	.0	.0	.0	.2
7	.0	.0	1.0	1.0	.0	.0	1.9	.0	.0	.0	1.0	.0	.0	1.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	3.8	.0	.0	3.8	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	1.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	1.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	3.8	3.4	7.7	.0	.0	14.9	.0	.2	.2	1.9	.0	.0	2.4

HGT	P						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.7	.0	.0	.0	.0	.0	.7	.2	.0	.0	.0	.0	.0	.2
1-2	.0	2.4	.0	.0	.0	.0	2.4	1.0	1.2	1.2	.0	.0	.0	3.4
3-4	.0	1.9	.0	.0	.0	.0	1.9	.0	1.0	.2	.0	.0	.0	1.2
5-6	.0	.0	.0	1.0	.0	.0	1.0	.0	.0	.0	1.9	.0	.0	1.9
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.7	4.3	.0	1.0	.0	.0	6.0	1.2	2.2	1.4	1.9	.0	.0	6.7

PERIOD: (OVER-ALL) 1964-1974

JULY

AREA 0027 VALDIVIA
40.35 74.5W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	SW	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	.0	.0	.0	1.2
1-2	.0	2.6	.7	.0	.0	.0	3.4	.0	.0	.5	.0	.0	.0	.0	.5
3-4	.0	3.1	2.2	.0	.0	.0	5.3	.0	.0	1.7	.7	.0	.0	.0	2.4
5-6	.0	.0	1.0	.0	.0	.0	1.0	.0	.0	1.0	.2	1.0	.0	.0	2.2
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	1.2	.0	.0	.0	1.4
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	1.7	.0	.0	1.7	.0	.0	.0	.2	.5	.0	.0	.7
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	5.8	3.8	1.7	.0	.0	11.3	.0	.0	4.6	2.4	1.4	.0	.0	8.4

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	NW	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	1.7	.0	.0	.0	.0	1.7	.0	.0	.0	.0	.0	.0	.0	.0	
1-2	.0	1.7	.0	.0	.0	.0	1.7	1.0	1.0	.0	.0	.0	.0	.0	1.9	
3-4	.0	1.9	2.9	.0	.0	.0	4.8	.0	.0	3.6	.0	.0	.0	.0	3.6	
5-6	.0	1.0	3.1	.0	.0	.0	4.1	.0	1.0	5.5	1.0	1.0	.0	.0	8.4	
7	.0	2.4	1.7	.7	.0	.0	4.8	.0	.2	.0	.2	.0	.0	.0	.5	
8-9	.0	.0	.7	2.9	.0	.0	3.6	.0	.0	1.2	5.8	.0	.0	.0	7.0	
10-11	.0	.0	.7	4.1	.0	.0	4.8	.0	.0	.0	1.4	.0	.0	.0	1.4	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	1.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	8.7	9.1	7.7	.0	.0	25.5	1.0	2.2	10.3	9.4	1.0	.0	.0	23.8	99.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	3.8	2.8	.0	.0	.0	.0	6.6	
1-2	1.9	11.3	.0	.0	.0	.0	15.1	
3-4	.0	11.3	9.4	.0	.0	.0	20.8	
5-6	.0	2.8	12.3	6.6	.9	.0	22.6	
7	.0	2.8	3.8	2.8	.0	.0	9.4	
8-9	.0	.0	1.9	8.5	.0	.0	10.4	
10-11	.0	.0	.9	11.3	.0	.0	12.3	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	1.9	.0	.0	1.9	
17-19	.0	.0	.0	.9	.0	.0	.9	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	5.7	31.1	30.2	32.1	.9	.0	100.0	106

PERIOD: (OVER-ALL) 1952-1974

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.1	4.9	3.8	1.6	.5	1.6	.5	1.1	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	30	5
6-7	.0	1.6	2.7	8.7	3.8	2.7	2.7	2.2	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	46	7
8-9	.0	1.1	1.1	6.5	8.7	2.2	2.2	1.6	.5	2.7	1.1	.0	.0	.0	.0	.0	.0	.0	.0	51	8
10-11	.0	.0	1.1	1.6	1.6	4.9	5.4	1.1	1.1	1.1	4.9	.0	.0	.0	.0	.0	.0	.0	.0	42	11
12-13	.0	.0	.5	.0	.5	1.1	1.1	.5	.0	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	9	11
>13	.0	.0	.0	.5	.0	1.1	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	10
INDET	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	
TOTAL	2	14	17	35	28	25	22	14	6	8	12	1	0	0	0	0	0	0	0	184	8
PCT	1.1	7.6	9.2	19.0	15.2	13.6	12.0	7.6	3.3	4.3	6.5	.5	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1867-1977

AUGUST

AREA 0027 VALDIVIA
40.4S 74.5W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	22.9	.0	3.4	.0	.0	.0	.0	26.3	2.5	.0	11.9	.0	.0	.0	59.3
NE	28.6	.0	28.6	.0	.0	.0	.0	57.1	7.1	.0	.0	.0	.0	.0	35.7
E	50.0	.0	.0	.0	.0	.0	.0	50.0	.0	.0	.0	.0	.0	.0	50.0
SE	8.3	8.3	.0	.0	.0	.0	.0	16.7	.0	.0	.0	.0	.0	.0	83.3
S	.0	4.3	.0	.0	.0	.0	.0	2.3	4.3	.0	4.9	.0	.0	.0	88.3
SW	4.1	1.0	.0	.0	.0	.0	.0	5.1	5.1	1.0	.0	.0	.0	.0	88.8
W	.0	3.0	.0	.0	.0	.0	.0	3.0	4.0	3.0	.0	.0	.0	.0	90.1
NW	10.9	.0	6.7	.0	.0	.0	.0	17.6	10.1	.0	5.0	.0	3.4	.0	63.9
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	20.0	.0	.0	.0	80.0
TOT PCT	8.1	1.7	2.3	.0	.0	.0	.0	12.2	4.7	.6	4.7	.0	.6	.0	77.3
TOT OBS:	172														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00003	8.7	.0	.0	.0	.0	.0	.0	8.7	2.2	.0	4.3	.0	.0	.0	84.8
06009	6.7	2.2	2.2	.0	.0	.0	.0	11.1	6.7	2.2	2.2	.0	.0	.0	77.8
12015	12.2	2.4	4.9	.0	.0	.0	.0	19.5	4.9	.0	4.9	.0	.0	.0	70.7
18021	4.9	2.4	2.4	.0	.0	.0	.0	9.8	4.9	.0	7.3	.0	2.4	.0	75.6
TOT PCT	8.1	1.7	2.3	.0	.0	.0	.0	12.1	4.6	.6	4.6	.0	.6	.0	77.5
TOT OBS:	173														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.8	4.1	5.2	3.1	1.4	*		14.6	17.0		14.4	30.0	15.3	13.3	14.2	.0	16.7	12.1
NE	.5	2.1	.9	.3	.1	*		3.9	10.7		2.5	.0	3.8	6.0	5.5	.0	3.5	2.6
E	.4	1.8	.9	.2	*	.0		3.4	9.9		3.0	.0	4.2	4.4	2.7	33.3	3.1	2.5
SE	.4	2.4	2.2	.7	.1	.0		5.9	12.8		5.0	.0	6.0	5.3	9.0	.0	5.3	4.9
S	1.4	6.6	7.0	1.7	.4	.1		17.2	12.7		22.3	.0	17.0	13.6	16.4	33.3	13.9	18.1
SW	.3	3.9	4.3	2.7	1.1	.2		12.4	17.5		13.3	.0	11.8	10.9	11.6	.0	12.8	15.0
W	.7	5.2	6.5	4.1	1.3	.1		17.9	17.0		18.9	.0	17.4	18.7	16.2	16.7	17.5	19.0
NW	.9	5.2	8.9	5.6	1.5	.2		22.4	17.9		18.9	50.0	21.1	24.4	22.6	16.7	24.5	22.5
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	2.3							2.3	.0		1.7	.0	3.3	3.4	1.8	.0	.9	3.3
TOT OBS	161	665	763	391	128	13	2121		15.4		357	2	368	327	339	3	456	269
TOT PCT	7.6	31.4	36.0	18.4	6.0	.6		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	03	06	12	18
N	2.6	5.5	3.6	2.3	.6		14.6	17.0	14.6	14.5	14.0	15.0	
NE	1.7	1.6	.5	.1	.1		3.9	10.7	2.4	4.8	5.5	3.1	
E	1.3	1.5	.5	*	.0		3.4	9.9	3.0	4.3	3.0	2.9	
SE	1.3	2.8	1.4	.3	*		5.9	12.8	5.0	5.7	8.9	5.1	
S	4.0	8.1	4.3	.6	.2		17.2	12.7	22.2	15.4	16.5	16.7	
SW	2.0	4.3	3.9	1.5	.7		12.6	17.5	13.2	11.3	11.5	13.6	
W	2.5	7.3	5.0	2.5	.6		17.9	17.0	18.8	18.0	16.2	18.1	
NW	2.6	8.4	6.9	3.7	.7		22.4	17.9	19.1	22.6	22.6	23.7	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	2.3						2.3	.0	1.7	3.3	1.8	1.8	
TOT OBS	429	841	555	234	62	2121		15.4	359	695	342	725	
TOT PCT	20.2	39.7	26.2	11.0	2.9		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1867-1977

AUGUST

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47			
00003	1.7	6.1	33.1	38.4	13.6	6.1	.8	14.8	100.0
06009	3.3	5.9	33.1	33.7	17.8	5.9	.3	14.9	100.0
12015	1.8	3.2	29.2	37.1	22.8	5.6	.3	16.1	100.0
18021	1.8	5.4	29.8	46.4	19.3	6.3	1.0	15.9	100.0
TOT	48	113	605	763	391	128	13	15.4	2121
PCT	2.3	5.3	31.4	36.0	18.4	6.0	.6	100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.6	.7	2.1	14.2		7.2
NE	.2	.0	.7	.7		5.7
E	.7	.0	.7	.0		3.0
SE	.9	3.2	1.1	1.5		4.4
S	3.4	3.5	10.4	4.1		5.2
SW	2.6	4.5	5.8	1.9		4.7
W	4.5	1.7	5.2	5.2		5.3
NW	2.1	.6	6.7	7.5		6.2
VAR	.0	.0	.0	.0		.0
CALM	.0	2.2	.0	.7		5.0
TOT OBS	20	22	44	48	134	5.6
TOT PCT	14.9	16.4	32.8	35.8	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999			
N	2.2	.0	1.1	2.2	5.8	1.3	.6	.0	.0	.0	4.3	
NE	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.9	
E	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.7	
SE	.0	.0	.0	.4	2.2	.0	.0	.0	.0	.0	4.1	
S	.0	.0	.7	1.9	3.7	5.0	.6	.0	.0	.0	9.5	
SW	.0	.0	.0	.2	.7	3.2	.9	.0	.0	.0	9.7	
W	.0	.0	.7	3.9	1.5	2.2	.9	.0	.0	.0	7.3	
NW	1.5	.7	1.1	1.1	3.2	3.2	1.5	.0	.0	.0	4.5	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	2.2	
TOT OBS	5	1	5	13	26	20	6	0	0	0	58	134
TOT PCT	3.7	.7	3.7	9.7	19.4	14.9	4.5	.0	.0	.0	43.3	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)				VSBY (NM)				VSBY (NM)			
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0	= OR >10	= OR >5	= OR >2	= OR >1
= OR >6500	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
= OR >5000	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
= OR >3500	.7	3.7	4.5	4.5	4.5	4.5	4.5	4.5	.7	3.7	4.5	4.5
= OR >2000	11.2	17.2	18.7	18.7	18.7	18.7	18.7	18.7	11.2	17.2	18.7	18.7
= OR >1000	26.1	36.6	38.8	38.8	38.8	38.8	38.8	38.8	26.1	36.6	38.8	38.8
= OR >600	32.8	46.3	48.5	48.5	48.5	48.5	48.5	48.5	32.8	46.3	48.5	48.5
= OR >300	39.6	48.5	52.2	52.2	52.2	52.2	52.2	52.2	39.6	48.5	52.2	52.2
= OR >150	39.6	48.5	53.0	53.0	53.0	53.0	53.0	53.0	39.6	48.5	53.0	53.0
= OR >0	39.6	50.0	56.7	56.7	56.7	56.7	56.7	56.7	39.6	50.0	56.7	56.7
TOTAL	45	67	76	76	76	76	76	76	45	67	76	76

TOTAL NUMBER OF OBS: 134

PCT FREQ NH <5/8: 43.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
3.9	5.9	12.4	9.8	7.8	10.5	10.5	10.5	26.8	153

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1897-1977

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TABLE 8

AREA 0027 VALDIVIA
40.45 74.5W

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VISBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
2<5	PCP	.0	.6	.0	.0	.0	.0	.0	2.3	.0	.0	2.9	
	NO PCP	1.0	.0	.0	.0	.6	.0	.6	.7	.0	.0	2.9	
	TOT %	1.0	.6	.0	.0	.6	.0	.6	3.1	.0	.0	5.8	
5<10	PCP	3.9	.6	.6	.0	.6	.6	.0	.7	.0	.0	7.0	
	NO PCP	2.6	.1	.0	.3	4.4	2.5	2.2	4.2	.0	.6	16.9	
	TOT %	6.5	.7	.6	.3	4.9	3.1	2.2	4.9	.0	.6	23.8	
10+	PCP	.6	.0	.0	1.2	.0	.1	.4	.0	.0	.0	2.3	
	NO PCP	8.4	.7	.6	5.5	18.0	11.0	11.5	9.3	.0	1.7	66.9	
	TOT %	9.0	.7	.6	6.7	18.0	11.2	11.9	9.3	.0	1.7	69.2	
TOT OBS		172											
TOT PCT		17.2	2.0	1.2	7.0	23.5	14.2	14.7	17.3	.0	2.9	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VISBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.4	
	11-21	.7	.0	.0	.0	.0	.0	.4	.5	.0	.0	1.7	
	22+	1.3	.4	.0	.0	.4	.0	.4	1.7	.0	.0	4.2	
	TOT %	2.0	.4	.0	.0	.4	.0	1.3	2.2	.0	.0	6.4	
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4	.4	
	4-10	.4	.0	.0	.0	.8	.0	.8	.8	.0	.0	3.0	
	11-21	2.2	.6	.4	.1	2.9	1.4	1.6	1.4	.0	.0	10.6	
	22+	2.3	.1	.0	.1	.3	.8	.4	1.4	.0	.0	5.3	
	TOT %	5.0	.7	.4	.2	4.0	2.2	2.9	3.6	.0	.4	19.5	
10+	0-3	.2	.2	.0	.4	.4	.2	.6	.0	.0	1.7	3.8	
	4-10	2.4	1.6	.2	2.8	4.9	7.1	6.0	4.2	.0	.0	29.2	
	11-21	3.9	.8	.4	2.5	10.0	3.8	6.7	3.7	.0	.0	33.9	
	22+	2.3	.2	.0	.4	.8	.4	1.3	.6	.0	.0	6.4	
	TOT %	8.9	2.9	.6	6.1	16.1	11.5	14.8	10.6	.0	1.7	73.3	
TOT OBS		236											
TOT PCT		16.3	4.0	1.1	6.4	20.6	13.8	19.0	16.4	.0	2.5	100.0	

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1867-1977

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <3/8 ANY MGT	TOTAL OBS
00003	2.7	.0	.0	10.8	21.6	10.8	8.1	.0	.0	.0	54.1	45.9	37
06009	2.9	.0	5.9	.0	20.6	14.7	.0	.0	.0	.0	44.1	55.9	34
12015	5.7	2.9	5.7	14.3	17.1	17.1	5.7	.0	.0	.0	68.6	31.4	35
18021	3.1	.0	3.1	12.5	18.8	15.6	3.1	.0	.0	.0	56.3	43.8	32
TOT	5	1	5	13	27	20	6	0	0	0	77	61	138
PCT	3.6	.7	3.6	9.4	19.6	14.5	4.3	.0	.0	.0	55.8	44.2	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.0	3.8	18.9	77.4	53
06009	.0	.0	.0	7.9	19.7	72.4	76
12015	.0	.0	.0	5.8	28.8	65.4	52
18021	.0	1.8	1.8	7.1	10.7	78.6	56
TOT	0	1	1	15	46	174	237
PCT	.0	.4	.4	6.3	19.4	73.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOURL (GMT)	<150 <50YD	<600 <1	<1000 <3	1000+ ANDS+	NM <3/8 AND 5+	TOTAL OBS
00003	2.8	2.8	16.7	38.9	44.4	36
06009	2.9	8.8	11.8	32.4	55.9	34
12015	6.1	15.2	30.3	39.4	30.3	33
18021	3.2	6.5	22.6	35.5	41.9	31
TOT	5	11	27	49	58	134
PCT	3.7	8.2	20.1	36.6	43.3	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
60/64	.0	.0	.0	.6	.0	.0	.0	.0	1	.6
55/59	.0	.0	.0	.6	1.2	1.2	3.6	.6	12	7.2
50/54	.0	.0	.6	1.8	6.0	12.6	16.2	12.0	82	49.1
45/49	.0	.0	.6	4.2	6.0	10.8	16.2	4.2	70	41.9
40/44	.0	.0	.0	.0	.6	.0	.6	.0	2	1.2
TOTAL	0	0	2	12	23	41	61	28	167	100.0
PCT	.0	.0	1.2	7.2	13.8	24.6	36.5	16.8		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
60/64	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
55/59	1.6	.0	.0	.6	1.8	.7	.4	1.9	.0	.0
50/54	12.4	.6	.6	1.2	7.2	6.3	8.2	10.8	.0	1.8
45/49	1.5	.9	.6	3.7	14.8	6.9	7.3	5.5	.0	.6
40/44	.0	.0	.0	.0	.6	.0	.4	.1	.0	.0
TOTAL	16.2	1.5	1.2	5.5	24.4	13.9	16.5	18.4	.0	2.4

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	59	56	54	49	45	41	39	49.0	354
06009	57	55	53	49	44	41	38	48.8	694
12015	57	55	54	49	45	41	41	49.2	341
18021	60	57	55	50	46	43	41	50.4	693
TOT	60	56	54	50	45	41	38	49.5	2082

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	18.8	25.0	39.6	16.7	81	48
06009	.0	7.1	7.1	33.3	35.7	16.7	80	42
12015	.0	11.6	7.0	20.9	37.2	23.3	80	43
18021	.0	17.1	22.9	17.1	31.4	11.4	75	35
TOT	0	14	23	41	61	29	79	168

AUGUST

PERIOD: (PRIMARY) 1966-1977
(OVER-ALL) 1867-1977

TABLE 17

AREA 0027 VALDIVIA
40.45 74.5W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37 40	41 44	45 48	49 52	53 56	57 60	TOT	W FOG	NO FOG
9/10	.0	.0	.0	.0	.6	.6	2	.6	.6
7/8	.0	.0	.0	.0	.0	.6	1	.0	.6
5	.0	.0	.0	.0	2.3	1.3	6	.6	3.1
4	.0	.0	.6	.0	1.9	.0	4	.6	1.9
3	.0	.0	.0	.6	.6	.0	2	.0	1.3
2	.0	.0	.0	3.8	5.0	.6	15	1.3	8.2
1	.0	.0	.6	2.5	1.9	.6	9	.0	5.7
0	.0	.0	.6	6.9	2.3	.0	16	1.3	8.8
-1	.0	.0	.6	6.3	2.5	.0	15	.0	9.4
-2	.0	.0	1.3	10.7	.0	.0	19	.0	11.9
-3	.0	.0	4.4	8.2	.6	.0	21	.0	13.2
-4	.0	.0	5.7	3.8	.0	.0	15	.0	9.4
-5	.0	.6	6.9	4.4	.6	.0	20	.0	12.6
-6	.0	.0	1.9	.6	.0	.0	4	.0	2.5
-7/-8	.0	1.3	3.8	.0	.0	.0	8	.0	5.0
-9/-10	.0	.0	.6	.0	.0	.0	1	.0	.6
-14/-16	.6	.0	.0	.0	.0	.0	1	.0	.6
TOTAL	1	3	43	76	30	6	159	7	152
PCT	.6	1.9	27.0	47.8	18.9	3.8	100.0	4.4	95.6

2: (OVER-ALL) 1966-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	1.2	1.2	.0	.0	.0	2.4	.0	.0	.0	.0	.0	.0	.0
3-4	.0	1.8	3.4	.0	.0	.0	5.2	.0	.3	1.2	.0	.0	.0	1.5
5-6	.0	1.2	2.4	.0	.0	.0	3.7	.0	1.2	.0	1.2	.0	.0	2.4
7	.0	.0	.0	1.2	.0	.0	1.2	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	2.4	.0	.0	2.4	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	4.3	7.0	3.7	.0	.0	14.9	.0	1.5	1.2	1.2	.0	.0	4.0

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3
3-4	.0	.0	2.4	.0	.0	.0	2.4	.0	.0	1.3	.0	.0	.0	1.5
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	.0	1.2
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	2.4	.0	.0	.0	2.4	.0	.6	1.5	1.5	.0	.0	3.7

PERIOD: (OVER-ALL) 1963-1977

AUGUST

AREA 0027 VALDIVIA
40.4S 74.5W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	2.1	.0	.0	.0	.0	2.1	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	1.8	.0	.0	.0	.0	2.7	.0	2.7	.0	.0	.0	.0	.0	.0
3-4	.0	.0	8.2	.0	.0	.0	8.2	.0	6.1	3.0	1.2	.0	.0	10.4	.0
5-6	.0	1.2	2.1	2.1	.0	.0	5.5	.0	3.7	1.5	1.2	.0	.0	6.4	.0
7	.0	.0	4.3	2.4	.0	.0	6.7	.0	.0	.6	.0	.0	.0	.6	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	.0	.0	1.2	.0
10-11	.0	.0	1.2	.0	.0	.0	1.2	.0	.2	.0	.0	.0	.0	.3	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	5.2	16.8	4.6	.0	.0	26.5	.0	12.8	6.7	2.4	.0	.0	22.0	.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	2.4	1.2	.0	.0	.0	3.7	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	2.7	.0	.0	.0	2.7	.0	1.5	3.0	1.2	.0	.0	5.8	.0
5-6	.0	.0	4.6	.0	.0	.0	4.6	.0	.0	1.5	1.2	.0	.0	2.7	.0
7	.0	.0	.0	1.2	.0	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	1.2	.0	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.9	.0	.0	.0	.0	.9	.0	.0	1.2	1.2	.0	.0	2.4	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	1.2	.0	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	3.4	8.4	3.7	.0	.0	15.5	.0	1.5	5.8	3.7	.0	.0	11.0	100.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	.0	2.4	.0	.0	.0	.0	2.4	.0
1-2	.0	8.5	3.7	.0	.0	.0	12.2	.0
3-4	.0	9.8	25.6	2.4	.0	.0	37.8	.0
5-6	.0	7.9	12.2	6.1	.0	.0	25.6	.0
7	.0	.0	4.9	4.9	.0	.0	9.8	.0
8-9	.0	.0	1.2	4.9	.0	.0	6.1	.0
10-11	.0	1.2	2.4	1.2	.0	.0	4.9	.0
12	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	1.2	.0	.0	1.2	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	29.3	50.0	20.7	.0	.0	100.0	82

PERIOD: (OVER-ALL) 1952-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.0	1.6	6.2	7.8	3.1	2.3	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	28	5
6-7	.0	.0	3.1	8.5	12.4	3.9	2.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	39	6
8-9	.0	.0	1.6	1.6	8.5	3.9	4.7	.0	2.3	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	30	8
10-11	.0	.0	.0	3.1	1.6	1.6	1.6	.8	.8	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	8
12-13	.0	.0	.8	2.3	1.6	.8	1.6	.8	3.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	9
15-19	.0	.8	.0	.0	.0	.0	.0	.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	15
INDET	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	6
TOTAL	0	3	15	30	35	16	15	2	11	2	0	0	0	0	0	0	0	0	0	129	7
PCT	.0	2.3	11.6	23.3	27.1	12.4	11.6	1.6	8.5	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

SEPTEMBER

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1864-1977

TABLE 1

AREA 0027 VALDIVIA
40.35 74.6W

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WNO DIR	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	DTHR FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FGD WD PCPN	FGD WD PCPN PAST HR	SNOKE HAZE	SPRAY BLWG DUST BLWG	NO SIG WEA
N	28.3	6.3	13.4	.0	.0	.0	.0	48.0	2.4	.0	4.7	.0	.0	.0	44.9
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
E	23.5	.0	.0	.0	.0	.0	.0	23.5	.0	.0	.0	.0	.0	.0	76.5
SE	.0	4.9	.0	.0	.0	.0	.0	4.9	.0	.0	4.9	.0	.0	.0	90.1
S	.0	2.1	.0	.0	.0	.0	.0	2.1	4.2	.0	4.2	.0	.0	.0	89.6
SW	2.5	5.1	2.5	.0	.0	.0	.0	10.2	2.5	.0	.0	.0	.0	.0	87.3
W	5.0	3.3	.0	.0	.0	.0	.0	8.3	9.9	.0	.0	.0	.0	.0	81.8
NW	20.4	4.8	9.0	.0	.0	.0	.0	34.1	3.0	.0	3.6	.0	.0	.0	59.3
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	.0	.0	.0	.0
TOT PCT	9.6	4.1	4.1	.0	.0	.0	.0	17.9	3.7	.0	3.2	.0	.0	.0	75.2
TOT OBS:	218														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SNOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
0000Z	10.5	1.8	3.5	.0	.0	.0	.0	15.8	3.5	.0	1.8	.0	.0	.0	78.9
0600Z	15.0	3.3	3.3	.0	.0	.0	.0	21.7	1.7	.0	3.0	.0	.0	.0	71.7
1201Z	5.8	7.7	3.8	.0	.0	.0	.0	17.3	3.8	.0	3.8	.0	.0	.0	75.0
1802Z	8.8	3.5	5.3	.0	.0	.0	.0	17.5	5.3	.0	5.3	.0	.0	.0	71.9
TOT TQT OBS:	10.2 226	4.0	4.0	.0	.0	.0	.0	18.1	3.5	.0	4.0	.0	.0	.0	74.3

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	1.0	5.2	5.5	2.3	.8	.1		15.0	14.6	15.8	43.8	13.0	14.6	14.3	10.7	16.2	14.9	
NE	.3	1.3	.9	.2	.1	.0		2.8	11.4	1.1	.0	3.8	3.8	3.3	3.6	3.1	1.1	
E	.4	1.3	.6	.3	.1	.0		2.7	10.3	2.1	.0	3.2	3.8	3.2	.0	3.0	.4	
SE	.4	4.2	4.0	.6	.1	.0		9.3	12.3	7.6	.0	10.5	11.5	12.0	14.3	7.4	7.8	
S	.9	6.6	8.1	1.8	.1	.0		17.4	12.5	20.1	.0	16.6	15.9	16.6	.0	17.1	19.5	
SW	.6	5.8	4.3	1.7	.7	.1		13.2	14.2	13.8	.0	13.7	11.8	12.2	14.3	12.4	16.5	
W	.5	5.7	5.0	3.2	1.0	.1		15.6	16.1	13.8	25.0	14.7	16.1	16.7	21.4	15.9	16.5	
NW	1.3	7.6	7.8	4.0	.6	.4		21.8	13.0	24.1	21.3	22.7	18.9	18.3	35.7	22.8	22.6	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	2.2							2.2	.0	1.6	.0	1.8	3.5	3.3	.0	2.1	.8	
TOT OBS	149	740	707	277	69	14	1956		13.8	309	4	332	285	299	7	471	249	
TOT PCT	7.6	37.8	36.1	14.2	3.5	.7		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	3.7	3.6	3.8	1.4	.4		15.0	14.6	16.1	13.8	14.2	15.8	
NE	1.1	1.1	.4	.2	.8		2.8	11.4	1.1	3.8	3.3	2.4	
E	1.0	1.3	.3	.1	.0		2.7	10.3	2.1	3.5	3.1	2.1	
SE	1.9	4.7	2.4	.4	.0		9.3	12.3	7.5	10.9	12.1	7.6	
S	3.2	9.8	4.0	.5	.0		17.4	12.5	19.8	16.2	16.3	17.9	
SW	3.0	5.7	3.2	1.0	.4		13.2	14.2	13.7	12.8	12.3	13.8	
W	3.0	5.5	5.0	1.8	.4		15.6	16.1	13.9	15.4	16.8	16.1	
NW	4.1	9.4	6.3	1.5	.5		21.8	15.0	24.2	20.9	18.7	22.7	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	2.2						2.2	.0	1.6	2.6	3.3	1.7	
TOT OBS	452	841	494	134	35	1956		13.8	313	617	306	720	
TOT PCT	23.1	43.0	25.3	6.9	1.8		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1884-1977

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47	48+			
0000	1.6	5.1	39.3	36.4	13.4	3.5	.6	13.6	100.0	313
0600	2.6	6.2	38.2	36.5	12.0	3.6	1.0	13.5	100.0	617
1200	3.3	3.9	39.9	34.0	15.7	3.3	.0	13.4	100.0	306
1800	1.7	5.6	36.0	36.7	15.7	3.6	.8	14.2	100.0	720
TOT	43	106	740	707	277	69	14	13.8		1956
PCT	2.2	5.4	37.8	36.1	14.2	3.5	.7	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.6	.5	3.0	6.7		6.8
NE	.0	.2	.0	.2		5.5
E	.9	1.1	.0	.0		1.8
SE	4.4	.3	2.1	1.2		3.0
S	8.4	8.7	8.8	1.5		3.7
SW	1.5	4.3	7.5	3.4		5.2
W	2.9	2.7	5.3	2.4		4.8
NW	1.4	1.8	2.4	13.1		6.9
VAR	.0	.0	.0	.0		.0
CALM	.0	.0	.0	.6		8.0
TOT OBS	33	32	48	51	164	5.0
TOT PCT	20.1	19.5	29.3	31.1	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999			
N	.0	.9	1.4	2.1	1.4	1.4	.6	.0	.6	.0	2.4	
NE	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	
SE	.0	.0	.0	.6	1.8	.0	.0	.6	.0	.0	5.0	
S	.6	.0	.0	1.5	6.1	.0	.0	.0	.0	.0	19.2	
SW	.0	.0	1.2	2.3	1.5	2.1	.0	.0	.0	.0	9.5	
W	.0	.0	.6	2.3	2.7	.3	.0	.0	.0	.0	7.5	
NW	.6	1.5	3.5	5.2	.9	2.9	.0	.0	.0	.6	5.5	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	
TOT OBS	2	4	11	24	24	11	1	1	1	1	84	164
TOT PCT	1.2	2.4	6.7	14.6	14.6	6.7	.6	.6	.6	.6	51.2	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
>5000	1.8	1.8	1.8	1.8	1.3	1.8	1.8	1.8
>3500	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
>2000	8.5	9.1	9.1	9.1	9.1	9.1	9.1	9.1
>1000	20.1	23.8	23.8	23.8	23.8	23.8	23.8	23.8
>600	28.0	37.8	38.4	38.4	38.4	38.4	38.4	38.4
>300	29.3	40.9	43.9	45.1	45.1	45.1	45.1	45.1
>150	29.3	42.7	45.7	47.6	47.6	47.6	47.6	47.6
>0	29.3	42.7	45.7	48.2	48.8	48.8	48.8	48.8
TOTAL	48	70	73	79	80	80	80	80

TOTAL NUMBER OF OBSI 164

PCT FREQ NH <5/8 51.2

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
10.5	6.8	11.1	13.2	10.0	8.4	10.5	7.4	21.6	190

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1864-1977

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VISBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.2	.0	.0	.0	.0	.0	.7	.5	.0	.0	1.4	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.2	.0	.0	.0	.0	.0	.7	.5	.0	.0	1.4	
1/2<1	PCP	.0	.0	.5	.0	.0	.0	.0	.5	.0	.0	.9	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5	
	TOT %	.0	.0	.5	.0	.0	.0	.0	.9	.0	.0	1.4	
1<2	PCP	2.8	.0	.0	.0	.0	.0	.5	.9	.0	.0	4.1	
	NO PCP	.2	.0	.0	.0	.9	.0	.0	.2	.0	.0	1.4	
	TOT %	3.0	.0	.0	.0	.9	.0	.5	1.1	.0	.0	5.5	
2<5	PCP	1.1	.0	.0	.5	.0	1.4	.0	1.6	.0	.0	4.6	
	NO PCP	1.1	.0	.0	1.4	.0	.5	.0	.2	.0	.5	3.7	
	TOT %	2.3	.0	.0	1.8	.0	1.8	.0	1.8	.0	.5	8.3	
5<10	PCP	1.8	.0	.0	.0	.0	.0	.0	2.3	.0	.0	4.1	
	NO PCP	1.0	.1	.0	.9	1.8	2.4	3.6	3.4	.0	.0	13.3	
	TOT %	2.9	.1	.0	.9	1.8	2.4	3.6	5.7	.0	.0	17.4	
10+	PCP	1.0	.0	.0	.0	.5	.5	.0	.8	.0	.0	2.8	
	NO PCP	5.2	.6	1.5	6.5	18.8	13.3	9.2	8.3	.0	.0	63.3	
	TOT %	6.2	.6	1.5	6.5	19.3	13.8	9.2	9.1	.0	.0	66.1	
TOT OBS													218
TOT PCT		14.6	.7	1.9	9.3	22.0	18.0	13.9	19.2	.0	.5	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VISBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.2	.2	.0	.0	.3	
	4-10	.2	.0	.0	.0	.0	.0	.3	.2	.0	.0	.7	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.2	.0	.0	.0	.0	.0	.3	.3	.0	.0	1.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.3	
	22+	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	
	TOT %	.0	.0	.3	.0	.0	.0	.0	.7	.0	.0	1.0	
1<2	0-3	.3	.0	.0	.0	.3	.0	.0	.3	.0	.0	1.0	
	4-10	1.4	.0	.0	.0	.3	.0	.3	.0	.0	.0	2.1	
	11-21	.5	.0	.0	.0	.0	.0	.0	.5	.0	.0	1.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	2.2	.0	.0	.0	.7	.0	.3	.9	.0	.0	4.1	
2<5	0-3	.2	.0	.0	.0	.0	.0	.0	.2	.0	.3	.7	
	4-10	.4	.0	.0	.0	.0	.7	.0	.3	.0	.0	1.4	
	11-21	.3	.0	.0	1.4	.0	.3	.0	.7	.0	.0	2.8	
	22+	1.3	.0	.0	.0	.0	.7	.3	.8	.0	.0	3.1	
	TOT %	2.2	.0	.0	1.4	.0	1.7	.3	1.9	.0	.3	7.9	
5<10	0-3	.3	.1	.0	.2	.2	.3	.0	.0	.0	.7	1.7	
	4-10	.7	.0	.0	.0	.0	1.0	.3	2.8	.0	.0	4.8	
	11-21	2.4	.0	.0	.7	1.4	.8	1.6	2.1	.0	.0	9.0	
	22+	.2	.0	.0	.0	.0	.0	.9	1.0	.0	.0	2.1	
	TOT %	3.5	.1	.0	.9	1.6	2.2	2.8	5.9	.0	.7	17.6	
10+	0-3	.3	.0	.3	.4	1.6	.0	.0	.8	.0	2.1	5.5	
	4-10	1.8	.1	1.1	6.2	7.5	7.2	4.5	3.0	.0	.0	31.4	
	11-21	2.6	.3	.3	2.3	6.6	5.3	3.8	2.8	.0	.0	24.1	
	22+	.7	.0	.0	.4	1.8	1.0	1.6	1.7	.0	.0	7.2	
	TOT %	5.3	.4	1.8	9.4	17.6	13.4	9.8	8.4	.0	2.1	68.3	
TOT OBS													290
TOT PCT		13.5	.5	2.2	11.6	19.8	17.3	13.9	18.0	.0	3.1	100.0	

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PERIOD: (PRIMARY) 1906-1977
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOUR (GMT)	0'0 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00603	.0	.0	4.9	22.0	9.8	4.9	.0	.0	.0	.0	41.5	56.5	41
06609	2.1	2.1	8.3	6.3	14.6	8.3	.0	.0	.0	.0	41.7	58.3	48
12615	.0	2.2	6.5	15.2	19.6	8.7	.0	2.2	2.2	.0	56.5	43.5	46
18621	2.3	4.7	4.7	11.6	9.3	2.3	2.3	.0	.0	2.3	39.5	60.5	43
TOT	2	4	11	24	24	11	1	1	1	1	80	98	178
PCT	1.1	2.2	6.2	13.5	13.5	6.2	.6	.6	.6	.6	44.9	55.1	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00603	1.4	.0	5.7	7.1	22.9	62.9	70
06609	2.2	1.1	4.4	6.6	14.3	71.4	91
12615	.0	1.5	7.7	6.2	9.2	75.4	65
18621	.0	2.7	1.4	11.0	23.3	61.6	73
TOT	3	4	14	23	52	203	299
PCT	1.0	1.3	4.7	7.7	17.4	67.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00603	.0	5.3	28.9	15.8	55.3	38
06609	2.3	14.0	20.9	25.6	53.5	43
12615	.0	9.5	28.6	35.7	35.7	42
18621	2.4	12.2	26.8	17.1	56.1	41
TOT	2	17	43	39	82	164
PCT	1.2	10.4	26.2	23.8	50.0	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
60/64	.0	.0	.0	.0	.8	.0	.0	.0	2	.8
55/59	.0	.0	.8	1.6	3.5	3.1	1.2	.0	28	11.0
50/54	.0	.0	.4	.4	5.9	10.6	13.0	14.2	113	44.5
45/49	.0	.0	.4	3.9	5.1	8.7	13.4	5.9	95	37.4
40/44	.0	.0	.0	.4	.8	2.0	1.6	1.6	16	6.3
TOTAL	0	0	4	14	36	63	79	58	254	100.0
PCT	.0	.0	1.6	5.5	14.2	24.8	31.1	22.8		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
60	.0	.0	.0	.2	.6	.0	.0	.0	.0	.0
55	.7	.0	.3	.2	3.7	2.5	.4	3.2	.0	.0
50	9.1	.1	.4	1.0	6.9	4.3	8.9	13.5	.0	.4
45	5.5	.5	.6	5.8	9.0	7.1	5.1	3.8	.0	.0
40	.0	.0	.8	3.1	1.1	.1	.7	.5	.0	.0
TOTAL	15.3	.6	2.1	10.3	21.3	14.0	15.1	21.1	.0	.4

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00603	60	58	55	50	45	43	41	50.2	311
06609	57	55	54	50	45	42	41	49.4	617
12615	58	57	55	50	45	41	41	49.9	297
18621	60	59	57	52	46	45	43	51.6	651
TOT	60	58	55	50	45	43	41	50.4	1876

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00603	.0	12.7	15.9	22.2	25.4	23.8	77	63		
06609	.0	4.2	8.3	20.8	37.5	29.2	82	72		
12615	.0	5.2	13.8	29.3	31.0	20.7	79	58		
18621	.0	5.7	17.1	25.7	31.4	20.0	79	70		
TOT	0	18	36	64	83	62	79	263		

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1864-1977

SEPTEMBER

AREA 0027 VALDIVIA
40.35 74.6W

TABLE 17

PCT FRQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41 44	45 48	49 52	53 56	57 60	TOT	W FOG	WD FOG
11/13	.0	.0	.0	.0	.5	1	.0	.5
9/10	.0	.0	.0	.0	1.5	3	.0	1.5
7/8	.0	.0	.0	1.5	2.0	7	1.5	2.0
6	.0	.0	.5	.5	1.5	5	.0	2.5
5	.0	.0	.0	1.5	3.0	9	.0	4.5
4	.0	.0	.0	1.0	.5	3	.0	1.5
3	.0	.0	.0	2.5	.0	5	.0	2.5
2	.0	.5	2.0	3.5	.0	12	.0	6.1
1	.0	.0	2.5	2.0	.5	10	.0	5.1
0	.0	.0	7.1	3.0	.0	20	.5	9.6
-1	.0	1.5	7.1	2.0	.0	21	.5	10.1
-2	.5	5.1	6.1	1.0	.0	25	.0	12.6
-3	.5	2.5	5.6	1.0	.0	19	.5	9.1
-4	.5	6.1	2.5	.0	.0	18	.5	8.6
-5	.5	6.1	3.5	.0	.0	20	.0	10.1
-6	.5	2.0	2.0	.0	.0	9	.5	4.0
-7/-8	1.5	3.0	.0	.0	.0	9	.0	4.5
-9/-10	.0	.5	.0	.0	.0	1	.0	.5
-11/-13	.5	.0	.0	.0	.0	1	.0	.5
TOTAL	9		77		19	198		190
PCT	4.5	27.3	38.9	19.7	9.6	100.0	4.0	96.0

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FRQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	1.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	1.9	.0	.0	.0	.0	1.9	.0	.0	.0	.0	.0	.0	.0
3-4	.0	2.6	.0	1.3	.0	.0	3.9	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	1.9	.0	.0	.0	1.9	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	1.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	1.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	1.9	.0	.0	1.9	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	4.5	3.9	4.2	.0	.0	12.7	.0	.0	.0	.0	.0	.0	.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3
1-2	.0	1.0	1.3	.0	.0	.0	2.3	.0	3.6	1.3	.0	.0	.0	4.9
3-4	.0	.0	.0	.0	.0	.0	.0	.0	1.6	1.3	.0	.0	.0	2.9
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.0	1.3	.0	.0	.0	2.3	.0	3.2	2.9	.0	.0	.0	6.1

PERIOD: (OVER-ALL) 1963-1977

SEPTEMBER

AREA 0027 VALDIVIA
40.35 74.6W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							PCT	SW							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	1.3	1.0	.0	.0	.0		2.3	.0	1.3	.0	.0	.0	.0		1.3
1-2	.0	4.2	1.0	.0	.0	.0		5.2	1.3	5.3	.3	.0	.0	.0		7.1
3-4	.0	2.3	2.6	.0	.0	.0		4.9	.0	.0	.3	.0	.0	.0		.3
5-6	.0	.0	2.6	1.0	.0	.0		3.6	.0	.0	2.6	.3	.0	.0		3.2
7	.0	1.3	4.9	1.0	.0	.0		7.1	.0	1.3	2.9	1.6	.0	.0		5.8
8-9	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	1.3	.0	.0		1.3
10-11	1.3	.0	.0	.0	.0	.0		1.3	.0	.0	.0	.0	.0	.0		.0
12	.0	.0	.0	.0	.0	.0		.0	.0	.3	.0	.0	.0	.0		.3
13-16	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
17-19	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
20-22	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
23-25	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
26-32	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
33-40	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
41-48	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
49-60	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
61-70	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
71-86	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
87+	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
TOT PCT	1.3	9.1	12.0	1.9	.0	.0		24.4	1.3	8.8	6.2	3.2	.0	.0		19.5

HGT	W							PCT	NW							PCT	TOTAL PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+			
<1	.0	.0	.0	.0	.0	.0		.0	.0	.3	.0	.0	.0	.0		.3	
1-2	.0	1.3	.0	.0	.0	.0		1.3	.0	1.9	.0	.0	.0	.0		1.9	
3-4	.0	.0	2.3	.0	.0	.0		2.3	.0	3.9	2.6	.0	.0	.0		6.5	
5-6	.0	2.3	.0	.0	.0	.0		2.3	1.3	.0	1.9	.0	.0	.0		3.2	
7	.0	1.3	.0	.0	.0	.0		1.3	.0	.0	4.2	.0	.0	.0		4.2	
8-9	.0	.0	1.3	.0	.0	.0		1.3	.0	.0	1.3	1.6	.0	.0		2.9	
10-11	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	1.9	.0	.0		1.9	
12	.0	1.0	.0	1.3	.0	.0		2.3	.0	.0	.0	.0	.0	.0		.0	
13-16	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
17-19	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
20-22	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
23-25	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
26-32	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
33-40	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
41-48	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
49-60	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
61-70	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
71-86	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
87+	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
TOT PCT	.0	5.8	3.6	1.3	.0	.0		10.7	1.3	5.8	10.4	3.6	.0	.0		21.1	98.7

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	1.3	2.6	2.6	.0	.0	.0	6.5	
1-2	1.3	19.5	3.9	.0	.0	.0	24.7	
3-4	.0	10.4	9.1	1.3	.0	.0	20.8	
5-6	1.3	2.6	9.1	1.3	.0	.0	14.3	
7	.0	3.9	13.0	2.6	.0	.0	19.5	
8-9	.0	.0	2.6	3.9	.0	.0	6.5	
10-11	1.3	.0	.0	3.9	.0	.0	5.2	
12	.0	1.3	.0	1.3	.0	.0	2.6	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	5.2	40.3	40.3	14.3	.0	.0	100.0	77

PERIOD: (OVER-ALL) 1951-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.7	6.8	4.1	.7	.7	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	22
6-7	.0	.7	4.1	7.5	10.2	3.4	2.0	.7	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	44
8-9	.0	.0	2.7	2.7	8.2	2.0	1.4	.0	.7	4.1	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	33
10-11	.0	.7	.0	2.0	2.0	1.4	2.0	4.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	18
12-13	.0	.0	1.4	.0	.0	.7	.7	1.4	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	7
>13	.0	.0	.0	.7	.7	2.0	3.4	.7	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	12
INDET	.7	.0	.7	.0	.0	.7	.7	.0	1.4	3.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11
TOTAL	2	12	19	20	32	18	15	10	7	11	1	0	0	0	0	0	0	0	0	0	147
PCT	1.4	8.2	12.9	13.6	21.8	12.2	10.2	6.8	4.8	7.5	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1869-1977

OCTOBER

AREA 0027 VALDIVIA
40.4S 74.6W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							NO SIG WEA
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGD WD PCPN	FGD WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	
N	11.8	.0	4.7	.0	.0	.0	.0	16.5	9.4	.0	.0	.0	.0	.0	74.1
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
S	.0	.0	4.2	.0	.0	.0	.0	4.2	.0	.0	2.3	1.5	.0	.0	92.0
SW	.0	.7	6.7	.0	.0	.0	.0	7.5	3.0	.0	1.5	.0	.0	.0	88.1
W	5.6	1.7	2.2	.0	.0	.0	.0	7.3	2.2	.0	2.2	.0	.0	.0	88.2
NW	10.7	.0	8.0	.0	.0	.0	.0	18.7	.0	.0	.0	.0	.0	.0	81.3
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	4.0	.4	4.4	.0	.0	.0	.0	8.4	1.8	.0	1.3	.4	.0	.0	88.0
TOT OBS:	225														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							NO SIG WEA
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGD WD PCPN	FGD WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	
00003	7.5	.0	7.5	.0	.0	.0	.0	13.2	1.9	.0	.0	.0	.0	.0	84.9
06009	3.6	.0	9.1	.0	.0	.0	.0	12.7	1.8	.0	1.8	.0	.0	.0	83.6
12015	4.7	1.6	3.1	.0	.0	.0	.0	9.4	1.6	.0	1.6	.0	.0	.0	87.5
18021	.0	.0	.0	.0	.0	.0	.0	.0	1.8	.0	1.8	1.8	.0	.0	94.6
TOT PCT	3.9	.4	4.8	.0	.0	.0	.0	8.8	1.8	.0	1.3	.4	.0	.0	87.7
TOT OBS:	228														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21	
N	.7	3.2	3.2	1.7	.4	.1		9.2	14.9		7.5	.0	10.1	9.5	10.4	.0	11.3	5.1
NE	.3	1.0	.2	*	.1	.0		1.7	9.6		1.4	.0	2.0	2.3	2.0	.0	1.3	1.2
E	.3	1.1	.3	*	.0	.0		1.7	7.6		1.4	.0	.9	3.4	2.2	16.7	1.4	.6
SE	.5	3.3	2.5	.5	.0	.0		6.7	10.9		3.8	.0	5.8	10.4	9.0	.0	7.0	4.8
S	1.3	9.2	10.2	2.9	.1	.0		23.7	12.6		25.1	50.0	25.1	24.3	25.7	16.7	19.8	23.7
SW	1.2	8.2	6.9	1.3	.3	.0		17.8	11.8		22.4	30.0	18.2	14.5	11.6	33.3	16.7	23.9
W	.9	6.7	6.5	2.2	.2	.2		16.8	13.5		16.6	.0	15.4	17.8	16.3	33.3	18.6	14.7
NW	.9	8.0	8.3	2.7	.7	.2		20.8	14.0		20.8	20.0	20.8	16.0	19.1	.0	22.7	25.2
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.6							1.6	.0		.9	.0	1.7	1.7	3.6	.0	1.3	.7
TOT OBS	162	850	794	237	36	10	2089		12.7		336	5	343	300	335	6	480	284
TOT PCT	7.8	40.7	38.0	11.3	1.7	.5		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+						00	03	06	12	18
N	1.8	3.9	2.5	.9	.2			9.2	14.9		7.4	9.8	10.2	9.0	
NE	.9	.6	.1	.1	.*			1.7	9.6		1.4	2.1	2.0	1.3	
E	.8	.8	.1	.0	.0			1.7	7.6		1.4	2.1	2.5	1.1	
SE	1.6	4.0	1.1	.*	.0			6.7	10.9		3.7	7.9	8.8	6.2	
S	4.8	12.0	6.4	.6	.0			23.7	12.6		25.5	24.8	25.6	21.2	
SW	4.2	9.6	3.3	.6	.*			17.8	11.8		22.5	16.5	12.0	19.4	
W	3.8	7.5	4.4	.8	.3			16.8	13.5		16.3	16.5	16.6	17.2	
NW	3.8	10.6	4.3	1.7	.3			20.8	14.0		20.8	18.5	18.8	23.6	
VAR	.0	.0	.0	.0	.0			.0	.0		.0	.0	.0	.0	
CALM	1.6							1.6	.0		.9	1.7	3.5	1.0	
TOT OBS	486	1023	462	100	18	2089			12.7		341	643	341	764	
TOT PCT	23.3	49.0	22.1	4.8	.9			100.0			100.0	100.0	100.0	100.0	

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TABLE 4

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PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	11-21	22-33	34-47	48+	MEAN	PCT FREQ	TOTAL OBS
0000	.9	5.3	43.7	38.4	9.7	1.8	.3	12.4	100.0	341
0600	1.7	7.2	41.5	36.4	11.0	1.6	.6	12.4	100.0	643
1200	3.5	6.5	40.2	36.1	11.7	1.8	.3	12.6	100.0	341
1800	1.0	5.5	38.9	40.1	12.2	1.8	.3	13.0	100.0	764
TOT	34	128	850	794	237	36	10	12.7		2089
PCT	1.6	6.1	40.7	38.0	11.3	1.7	.3		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.4	.3	2.4	4.7		7.1
NE	.1	.1	1.5	.6		6.0
E	.4	.4	1.3	.0		4.8
SE	1.5	.3	1.3	.5		3.6
S	13.4	3.2	7.1	3.2		3.3
SW	2.3	1.4	5.4	7.1		6.1
W	1.4	2.8	6.1	10.9		6.4
NW	1.3	.8	7.3	8.0		6.7
VAR	.0	.0	.0	.0		.0
CALM	1.0	.5	1.0	.5		3.8
TOT OBS	43	19	66	70	198	5.4
TOT PCT	21.7	9.6	33.3	35.4	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	400 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.0	.0	1.4	2.0	.9	1.3	.5	.0	.5	1.1	
NE	.0	.0	.0	.1	.5	.5	.0	.0	.0	.0	1.3	
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	
SE	.0	.0	.1	.0	.5	.3	.0	.5	.0	.0	2.1	
S	.0	.0	2.9	.5	2.9	1.3	.5	.0	.0	.0	18.7	
SW	.0	.0	1.5	1.0	2.1	2.3	2.8	.0	.0	.0	6.4	
W	.0	.5	1.0	3.8	3.8	3.2	1.8	.0	.0	.0	7.1	
NW	.5	.5	1.5	.3	1.8	3.3	.8	.0	1.0	.0	7.7	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.5	.0	.0	.0	.0	.5	.0	.0	2.0	
TOT OBS	1	2	15	14	27	23	14	3	2	1	96	198
TOT PCT	.5	1.0	7.6	7.1	13.6	11.6	7.1	1.5	1.0	.5	48.5	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
>5000	1.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0
>3500	6.6	9.1	9.6	9.6	9.6	9.6	9.6	9.6
>2000	14.7	19.8	21.3	21.3	21.3	21.3	21.3	21.3
>1000	20.3	32.5	35.5	35.5	35.5	35.5	35.5	35.5
>600	25.4	40.1	43.1	43.1	43.1	43.1	43.1	43.1
>300	27.4	47.7	50.8	50.8	50.8	50.8	50.8	50.8
>150	28.4	48.7	51.8	51.8	51.8	51.8	51.8	51.8
>0	28.9	49.2	52.3	52.3	52.3	52.3	52.3	52.3
TOTAL	57	97	103	103	103	103	103	103

TOTAL NUMBER OF OBSI 197

PCT FREQ NH <5/8 47.7

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
	9.9	9.4	9.9	8.9	10.3	5.4	11.8	8.4	26.1	.0	203

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.7	.2	.0	.0	.0	.0	.0	.9
	TOT %	.0	.0	.0	.0	.7	.2	.0	.0	.0	.0	.0	.9
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2<5	PCP	.0	.0	.0	.0	.3	.1	.4	.4	.0	.0	1.3	
	NO PCP	.4	.0	.0	.0	.0	.4	.4	.0	.0	.0	1.3	
	TOT %	.4	.0	.0	.0	.3	.6	.9	.4	.0	.0	2.7	
5<10	PCP	1.6	.0	.0	.0	.9	.9	.7	2.7	.0	.0	6.7	
	NO PCP	2.0	.6	.7	.7	10.3	3.1	4.8	4.7	.0	.4	27.4	
	TOT %	3.6	.6	.7	.7	11.2	4.0	5.5	7.4	.0	.4	34.1	
10+	PCP	.0	.0	.0	.0	.0	.1	.3	.0	.0	.0	.4	
	NO PCP	5.5	1.6	1.1	2.7	17.4	10.1	12.8	9.0	.0	1.8	61.9	
	TOT %	5.5	1.6	1.1	2.7	17.4	10.2	13.1	9.0	.0	1.8	62.3	
TOT OBS													223
TOT PCT		9.5	2.1	1.8	3.4	29.6	15.0	19.5	16.8	.0	2.2	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.5	.2	.0	.0	.0	.0	.7	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.5	.2	.0	.0	.0	.0	.7	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.3	.3	.0	.0	.3	.3	.0	.0	.0	.0	1.4	
	11-21	.0	.0	.0	.0	.3	.4	.3	.3	.0	.0	1.4	
	22+	.3	.0	.0	.0	.0	.0	.3	.0	.0	.0	.7	
	TOT %	.7	.3	.0	.0	.6	.8	.7	.3	.0	.0	3.5	
5<10	0-3	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	.7	
	4-10	1.0	.0	.5	.5	1.6	1.2	1.0	2.1	.0	.0	8.0	
	11-21	2.2	.3	.0	.3	4.7	1.6	3.2	3.7	.0	.0	16.1	
	22+	.6	.1	.0	.0	2.4	.7	.0	.3	.0	.0	4.2	
	TOT %	3.8	.4	.5	.9	8.7	3.5	4.6	6.1	.0	.3	29.0	
10+	0-3	.6	1.0	.4	.0	.7	.7	1.0	.5	.0	1.7	6.6	
	4-10	2.3	.4	.6	1.8	4.6	4.6	4.5	3.1	.0	.0	22.0	
	11-21	1.7	.0	.0	.8	10.8	5.9	6.5	4.7	.0	.0	30.4	
	22+	.3	.0	.0	.0	4.9	1.5	.3	.3	.0	.0	7.3	
	TOT %	5.0	1.4	1.0	2.6	21.1	12.7	12.2	8.7	.0	1.7	66.4	
TOT OBS													286
TOT PCT		9.5	2.2	1.6	3.5	30.9	17.1	17.8	15.2	.0	2.1	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	0/0 149	1/0 299	3/0 599	6/0 999	10/0 1999	20/0 3499	35/0 4999	50/0 6499	65/0 7999	80/0+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	.0	2.0	10.2	4.1	14.3	6.1	6.1	.0	2.0	.0	44.9	55.1	49
06009	.0	.0	6.4	8.5	14.9	12.8	6.4	.0	.0	.0	48.9	51.1	47
12015	.0	1.8	10.5	8.8	15.8	15.8	5.3	3.5	.0	.0	61.4	38.6	57
18021	2.0	.0	2.0	8.2	10.2	10.2	10.2	2.0	2.0	2.0	49.0	51.0	49
TOT	1	2	15	15	28	23	14	3	2	1	104	98	202
PCT	.5	1.0	7.4	7.4	13.9	11.4	6.9	1.5	1.0	.5	51.5	48.5	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<3	3<4	4<5	5<6	6<7	7<8	TOTAL OBS
00003	.0	.0	.0	3.2	41.3	55.6	63			
06009	.0	.0	.0	8.3	33.3	58.3	72			
12015	.0	1.3	.0	2.7	25.3	70.7	75			
18021	.0	1.3	1.3	1.3	19.0	77.2	79			
TOT	0	2	1	11	84	191	289			
PCT	.0	.7	.3	3.8	29.1	66.1	100.0			

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <50VD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.0	12.2	18.4	26.5	55.1	49
06009	.0	6.7	24.4	26.7	48.9	45
12015	.0	12.7	23.6	38.2	38.2	55
18021	2.1	4.2	12.5	37.5	50.0	48
TOT	1	18	39	64	94	197
PCT	.5	9.1	19.8	32.5	47.7	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.5	.0	.0	.0	.0	.0	1	.5
60/64	.0	.0	.5	.0	.0	.0	.0	.0	1	.5
55/59	.0	.0	1.0	1.0	3.3	9.5	3.4	2.4	44	21.0
50/54	.0	.0	.5	1.9	7.6	12.9	21.9	14.3	124	59.0
45/49	.0	.0	.0	.0	2.4	7.6	5.2	2.4	37	17.6
40/44	.0	.0	.0	.0	.5	.0	.5	.5	3	1.4
TOTAL	0	0	5	6	29	63	66	41	210	100.0
PCT	.0	.0	2.4	2.9	13.8	30.0	31.4	19.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.5	.0	.0	.0	.0	.0	.0
.0	.0	.0	.1	.4	.0	.0	.0	.0	.0
3.1	.1	1.3	.8	5.0	2.4	4.2	3.1	.0	1.0
5.6	1.7	.4	.8	18.7	7.3	11.2	13.0	.0	.5
1.0	.5	.0	1.1	3.9	5.7	3.1	1.0	.0	1.4
.0	.0	.0	.0	.7	.7	.0	.0	.0	.0
9.6	2.3	1.7	3.3	28.7	16.1	18.5	17.0	.0	2.9

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	63	58	56	52	47	45	45	51.7	335
06009	59	57	55	51	46	44	42	50.7	642
12015	62	59	57	52	47	43	42	51.9	330
18021	66	62	59	54	49	46	45	53.7	668
TOT	66	60	57	52	47	45	42	52.1	1975

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	12.2	28.6	36.7	22.4	81	49		
06009	.0	.0	15.4	23.1	32.7	28.8	82	52		
12015	.0	3.4	8.6	36.2	32.8	19.0	80	58		
18021	.0	16.7	18.5	31.5	22.2	11.1	74	54		
TOT	0	11	29	64	66	43	79	213		

OCTOBER

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1869-1977

TABLE 17

AREA 0027 VALDIVIA
40.4S 74.6W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41 44	45 48	49 52	53 56	57 60	61 64	65 68	TOT	W FOG	WD FOG
14/16	.0	.0	.0	.0	.0	.0	.5	1	.0	.5
9/10	.0	.0	.0	.0	2.0	.0	.0	4	.0	2.0
7/8	.0	.0	.0	.0	.5	.0	.0	1	.0	.5
6	.0	.0	.0	.0	1.0	.0	.0	2	.0	1.0
5	.0	.0	.0	1.5	1.5	.0	.0	6	.0	3.0
4	.0	.0	.0	1.5	1.0	.0	.0	5	.0	2.5
3	.0	.0	.0	3.5	2.0	.0	.0	11	.0	5.5
2	.0	.0	.5	7.5	.5	.0	.0	17	.5	8.0
1	.0	.0	4.0	5.5	.0	.0	.0	19	.0	9.5
0	.0	.5	8.0	3.5	.5	.0	.0	25	.0	12.4
-1	.0	.5	6.0	3.0	.0	.0	.0	15	.0	9.5
-2	.0	2.5	9.5	4.5	.0	.0	.0	33	.5	15.9
-3	.0	.5	10.0	.5	.0	.0	.0	22	.5	10.4
-4	.0	2.0	3.5	.0	.0	.0	.0	11	.0	5.5
-5	.0	3.0	3.0	1.0	.0	.0	.0	14	.0	7.0
-6	.5	.0	.5	.0	.0	.0	.0	2	.0	1.0
-7/-8	.0	1.0	.5	1.0	.0	.0	.0	5	.0	2.5
-9/-10	.0	.0	1.0	.0	.0	.0	.0	2	.0	1.0
-11/-12	.0	.0	.5	.0	.0	.0	.0	1	.0	.5
-14/-16	.5	.0	.0	.0	.0	.0	.0	1	.0	.5
TOTAL	2		94		18		1	201	3	198
PCT	1.0	10.0	46.8	32.8	9.0	.0	.5	100.0	1.5	98.5

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

WGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.4
1-2	.0	.9	2.2	.0	.0	.0	3.1	.9	.0	.0	.0	.0	.0	.9
3-4	.0	.9	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	.9
5-6	.0	.0	1.5	1.8	.0	.0	3.3	.0	.9	.0	.0	.0	.0	.9
7	.0	.0	.9	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.8	4.6	1.8	.0	.0	8.1	1.1	1.1	.0	.0	.0	.0	2.2

WGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.7	.7	.0	.0	.0	.0	1.3	.0	1.1	.0	.0	.0	.0	1.1
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.0	.0	.0	1.5
3-4	.0	.9	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	.9
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.7	1.5	.0	.0	.0	.0	2.2	.0	1.1	1.8	.0	.0	.0	2.9

PERIOD: (OVER-ALL) 1963-1977

OCTOBER

AREA 0027 VALDIVIA
40.45 74.6W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							PCT	SW							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	1.3	.0	.0	.0	.0		1.3	.0	2.2	1.8	.0	.0	.0		3.9
1-2	.0	4.4	4.2	.0	.0	.0		8.6	.0	.9	3.1	.0	.0	.0		4.8
3-4	.0	2.6	3.5	.0	.0	.0		6.1	.0	.0	3.5	.0	.0	.0		3.5
5-6	.0	.0	5.7	.0	.0	.0		5.6	.0	.0	2.2	.0	.0	.0		2.2
7	.0	.9	5.0	.9	.0	.0		6.8	.0	.0	.2	.0	.0	.0		.2
8-9	.0	.0	.0	.0	.0	.0		.0	.0	.0	.2	.0	.0	.0		.2
10-11	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
12	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
13-16	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
17-19	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
20-22	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
23-25	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
26-32	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
33-40	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
41-48	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
49-60	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
61-70	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
71-86	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
87+	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
TOT PCT	.0	9.2	18.4	1.8	.0	.0		29.4	.9	3.1	11.0	.0	.0	.0		14.9

HGT	W							PCT	NW							PCT	TOTAL PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+			
<1	1.5	.7	.0	.0	.0	.0		2.2	1.1	.0	.0	.0	.0	.0		1.1	
1-2	.0	1.5	2.4	.0	.0	.0		4.2	.0	3.7	1.3	.0	.0	.0		5.0	
3-4	.9	1.3	2.6	.0	.0	.0		4.8	.0	3.1	7.0	.0	.0	.0		10.1	
5-6	.0	.0	2.4	.0	.0	.0		2.4	.0	.0	2.0	.0	.0	.0		2.0	
7	.0	.0	3.3	.0	.0	.0		3.3	.0	.0	.2	.0	.0	.0		.2	
8-9	.0	.0	.7	.0	.0	.0		.7	.0	.0	.0	.0	.0	.0		.0	
10-11	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
12	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
13-16	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
17-19	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
20-22	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
23-25	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
26-32	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
33-40	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
41-48	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
49-60	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
61-70	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
71-86	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
87+	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
TOT PCT	2.4	3.5	11.6	.0	.0	.0		17.5	1.1	6.8	10.5	.0	.0	.0		18.4	95.6

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT DBS
<1	6.1	6.1	1.8	.0	.0	.0	14.0	
1-2	2.6	11.4	14.9	.0	.0	.0	28.9	
3-4	.9	8.8	16.7	.0	.0	.0	26.3	
5-6	.9	.9	14.0	2.6	.0	.0	18.4	
7	.0	.9	9.6	.9	.0	.0	11.4	
8-9	.0	.0	.9	.0	.0	.0	.9	
10-11	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	10.5	28.1	57.9	3.5	.0	.0	100.0	114

PERIOD: (OVER-ALL) 1951-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.3	6.4	9.4	5.8	4.7	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	30
6-7	.0	4.1	8.2	1.8	6.4	4.1	3.5	1.2	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	53
8-9	.0	.6	3.5	2.3	3.5	2.9	4.1	1.8	1.8	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	8
10-11	.0	.0	.0	.0	1.2	1.8	2.9	1.8	.6	.0	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0	15
12-13	.0	.0	.0	1.2	.0	.0	1.2	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
INDET	3.5	.6	.0	.6	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11
TOTAL	10	20	36	20	30	15	21	8	8	0	0	3	0	0	0	0	0	0	0	0	171
PCT	5.8	11.7	21.1	11.7	17.5	8.8	12.3	4.7	4.7	.0	.0	1.8	.0	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1870-1977

NOVEMBER

AREA 0027 VALDIVIA
40.45 74.6W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA						
WIND DIR	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA	
N	17.9	2.9	5.7	.0	.0	.0	.0	23.6	8.6	.0	2.1	.0	.0	.0	65.7	
NE	29.4	.0	11.8	.0	.0	.0	.0	41.2	.0	.0	.0	.0	.0	.0	58.8	
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	
S	.0	.0	1.8	.0	.0	.0	.0	1.8	.0	.0	.0	1.3	.0	.0	96.9	
SW	.0	2.3	.0	.0	.0	.0	.0	2.3	7.5	.0	.0	.5	.0	.0	89.7	
W	2.5	4.5	2.5	.0	.0	.0	.0	9.6	12.7	.0	2.5	.0	.0	.0	75.2	
NW	3.6	2.9	11.7	.0	.0	.0	.0	18.2	5.8	.0	6.6	.0	.0	.0	69.3	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	
TOT PCT	4.6	2.1	3.8	.0	.0	.0	.0	10.0	5.9	.0	1.7	.4	.0	.0	82.0	
TOT OBS:	239															

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00003	1.6	.0	4.7	.0	.0	.0	.0	6.3	7.8	.0	1.6	3.1	.0	.0	81.3
06009	3.4	.0	3.4	.0	.0	.0	.0	6.8	6.8	.0	1.7	.0	.0	.0	84.7
12015	9.8	3.3	3.3	.0	.0	.0	.0	16.4	3.3	.0	1.6	.0	.0	.0	78.7
18021	6.3	4.8	3.2	.0	.0	.0	.0	12.7	4.8	.0	1.6	.0	.0	.0	81.0
TOT PCT	5.3	2.0	3.6	.0	.0	.0	.0	10.5	5.7	.0	1.6	.8	.0	.0	81.4
TOT OBS:	247														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.8	2.3	2.5	.6	.1	.0		6.3	12.3		5.5	.0	5.2	4.2	5.2	16.7	9.9	5.5
NE	.2	.6	.4	.1	*	.0		1.2	10.7		.9	20.0	1.3	1.7	2.5	.0	.6	.2
E	.1	.5	.2	.1	.0	.0		.9	8.0		.0	.0	.8	2.1	1.8	.0	.6	.3
SE	.1	1.8	2.0	.8	.2	.0		4.9	14.9		3.3	.0	6.1	8.1	5.0	.0	3.9	4.2
S	1.7	10.3	13.6	4.2	.0	.0		29.8	13.3		31.6	.0	29.3	29.2	33.0	50.0	25.1	33.4
SW	1.1	9.7	6.6	1.5	.1	*		19.0	11.3		20.3	20.0	20.6	17.8	16.9	33.3	17.6	21.2
W	.8	6.7	7.1	2.4	.5	.0		17.4	13.5		18.0	40.0	17.0	16.3	15.3	.0	19.0	18.4
NW	1.0	6.2	7.5	2.8	.8	.0		18.3	14.4		18.7	20.0	19.0	17.1	16.5	.0	20.8	15.9
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	2.2							2.2	.0		1.7	.0	.9	3.6	3.6	.0	2.5	.8
TOT OBS	163	781	812	255	24	1	2046		12.8		346	5	349	280	329	6	472	259
TOT PCT	8.0	38.2	39.7	12.5	1.7	*		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+						00	03	06	12	18
N	1.8	2.5	1.8	.2	*			6.3	12.3		5.4	4.7	5.4	8.4	
NE	.5	.5	.2	*	.0			1.2	10.7		1.2	1.3	2.5	.5	
E	.5	.2	.1	.0	.0			.9	8.0		.0	1.4	1.8	.5	
SE	.7	2.4	1.3	.6	.0			4.9	14.9		3.2	7.0	4.9	4.0	
S	5.9	13.2	9.8	.9	.0			29.8	13.3		31.1	29.3	33.3	28.0	
SW	4.4	10.9	3.3	.4	*			19.0	11.3		20.3	19.3	17.2	18.9	
W	3.5	8.3	4.4	1.3	.0			17.4	13.5		18.3	16.7	15.1	18.8	
NW	3.4	8.2	4.9	1.3	.3			18.3	14.4		18.7	18.1	16.3	19.1	
VAR	.0	.0	.0	.0	.0			.0	.0		.0	.0	.0	.0	
CALM	2.2							2.2	.0		1.7	2.1	3.6	1.9	
TOT OBS	467	947	527	97	8	2046			12.8		351	629	335	731	
TOT PCT	22.8	46.3	25.8	4.7	.4			100.0			100.0	100.0	100.0	100.0	

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000	1.7	4.6	37.3	43.0	12.0	1.4	.0	13.1	100.0	351
0600	2.1	6.7	39.6	37.2	13.0	1.3	.2	12.6	100.0	629
1200	3.6	7.5	37.9	36.4	12.5	2.1	.0	12.2	100.0	335
1800	1.9	4.8	37.5	41.7	12.2	1.9	.0	13.1	100.0	731
TOT	45	118	781	812	255	34	1	12.8		2046
PCT	2.2	5.8	38.2	39.7	12.5	1.7	*	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.0	.8	4.6	10.8		7.3
NE	.0	.0	.4	3.0		7.6
E	.0	.0	.4	.4		7.5
SE	.3	.0	.0	.1		2.6
S	8.2	5.7	5.0	6.4		4.2
SW	3.9	2.6	7.0	9.0		5.6
W	2.1	2.1	6.4	5.0		5.8
NW	.0	.8	3.0	8.5		7.2
VAR	.0	.0	.0	.0		.0
CALM	1.5	1.0	.5	.5		3.1
TOT OBS	31	25	53	85	194	5.7
TOT PCT	16.0	12.9	27.3	43.8	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION												
000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS	
.4	.0	.0	6.3	3.4	1.4	.9	.5	.0	.0	3.4		
.1	.0	.0	.8	.9	1.5	.0	.0	.0	.0	.0		
.0	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0		
.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.3		
.0	.0	.0	2.8	2.1	2.4	1.4	.0	.5	.0	16.1		
.0	.0	.0	2.4	5.0	3.4	1.2	.0	.0	.0	10.4		
.5	.0	.0	2.4	4.1	1.9	.5	.0	.0	.0	6.1		
.0	.0	.0	4.3	3.2	2.2	.1	.0	.0	.0	2.4		
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
.0	.0	.0	.5	.5	.0	.0	.0	.0	.0	3.1		
.2	.0	.0	.37	.39	.25	.8	.1	.1	.0	.81		
1.0	.0	.0	19.1	20.1	12.9	4.1	.5	.5	.0	41.8	100.0	

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.0	.5	.5	.5	.5	.5	.5	.5
= OR >5000	.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0
= OR >3500	4.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0
= OR >2000	13.9	17.4	18.4	18.4	18.4	18.4	18.4	18.4
= OR >1000	29.9	37.3	39.3	39.3	39.3	39.3	39.3	39.3
= OR >600	37.3	54.2	57.7	58.2	58.2	58.2	58.2	58.2
= OR >300	37.3	54.2	57.7	58.2	58.2	58.2	58.2	58.2
= OR >150	37.3	54.2	57.7	58.2	58.2	58.2	58.2	58.2
= OR >0	37.3	54.2	57.7	58.7	59.2	59.2	59.2	59.2
TOTAL	75	109	116	118	119	119	119	119

TOTAL NUMBER OF OBS: 201

PCT FREQ NH <5/8: 40.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
	9.4	7.6	7.1	8.0	7.1	12.1	7.6	6.7	33.9	.4	224

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4
1<2	PCP	.0	.4	.0	.0	.0	.0	.4	.0	.0	.0	.0	.8
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.4	.0	.0	.0	.0	.4	.0	.0	.0	.0	.8
2<5	PCP	.4	.0	.0	.0	.0	.0	.0	.8	.0	.0	1.3	
	NO PCP	1.2	.0	.0	.0	.0	.0	.4	1.4	.0	.0	2.9	
	TOT %	1.6	.0	.0	.0	.0	.0	.4	2.2	.0	.0	4.2	
5<10	PCP	1.5	.9	.0	.0	.0	.0	.4	1.4	.0	.0	4.2	
	NO PCP	4.5	.1	.0	.4	3.6	4.4	2.1	3.8	.0	.0	18.8	
	TOT %	6.0	1.0	.0	.4	3.6	4.4	2.5	5.1	.0	.0	23.0	
10+	PCP	1.3	.0	.0	.0	.4	.5	.7	.4	.0	.0	3.3	
	NO PCP	5.5	2.0	.6	.3	19.7	17.4	12.3	6.6	.0	.0	68.2	
	TOT %	6.8	2.0	.6	.3	20.1	17.9	13.1	7.0	.0	.0	71.5	
TOT OBS													239
TOT PCT		14.6	3.6	.6	.7	23.6	22.3	16.4	14.3	.0	3.8	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.3	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	TOT %	.0	.3	.0	.0	.0	.0	.3	.0	.0	.0	.7	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	1.3	.0	.0	.0	.0	.0	.3	1.5	.0	.0	3.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	1.3	.0	.0	.0	.0	.0	.3	1.8	.0	.0	3.5	
5<10	0-3	.7	.0	.0	.0	.0	.3	.0	.0	.0	.0	1.0	
	4-10	1.6	.4	.0	.0	1.5	2.7	1.4	2.5	.0	.0	10.1	
	11-21	3.0	.0	.0	.3	2.2	1.0	1.4	3.3	.0	.0	11.2	
	22+	.4	.4	.0	.0	.0	.0	.0	.9	.0	.0	1.7	
	TOT %	5.7	.9	.0	.3	3.7	4.0	2.8	6.7	.0	.0	24.1	
10+	0-3	.6	.1	.3	.0	.7	1.2	.5	.4	.0	3.1	7.0	
	4-10	1.9	.5	.3	.3	7.4	6.3	4.5	3.6	.0	.0	24.8	
	11-21	2.8	1.0	.0	.3	10.6	8.7	5.5	1.8	.0	.0	30.8	
	22+	1.0	.0	.0	.0	3.8	1.8	1.7	.3	.0	.0	8.7	
	TOT %	6.4	1.7	.5	.6	22.6	18.1	12.2	6.2	.0	3.1	71.3	
TOT OBS													286
TOT PCT		13.6	3.0	.5	1.0	26.2	22.1	15.6	14.8	.0	3.1	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	.0	.0	.0	20.8	15.1	15.1	1.9	1.9	.0	.0	54.7	45.3	53
06009	.0	.0	.0	30.2	20.9	11.6	2.3	.0	.0	.0	65.1	34.9	43
12015	3.7	.0	.0	13.0	22.2	14.8	7.4	.0	.0	.0	61.1	38.9	54
18021	.0	.0	.0	12.3	22.8	10.5	3.5	.0	1.8	.0	50.9	49.1	57
TOT	2	0	0	38	42	27	8	1	1	0	119	88	207
PCT	1.0	.0	.0	18.4	20.3	13.0	3.9	.5	.5	.0	57.5	42.5	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.0	4.1	21.9	74.0	73
06009	.0	.0	.0	.0	27.5	72.5	80
12015	.0	1.5	2.9	4.4	20.6	70.6	68
18021	.0	.0	.0	5.5	26.0	68.5	73
TOT	0	1	2	10	71	210	294
PCT	.0	.3	.7	3.4	24.1	71.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.0	.0	23.5	33.3	43.1	51
06009	.0	.0	31.0	35.7	33.3	42
12015	3.8	3.8	18.9	43.4	37.7	53
18021	.0	.0	18.2	36.4	45.5	55
TOT	2	2	45	75	81	201
PCT	1.0	1.0	22.4	37.3	40.3	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.0	.0	.4	.4	.0	.0	2	.9
60/64	.0	.0	.0	1.3	.9	3.4	4.3	.9	25	10.6
55/59	.0	.0	.0	2.6	2.6	12.8	16.2	3.8	89	37.9
50/54	.0	.0	.4	.4	10.6	11.5	15.3	8.5	110	46.8
45/49	.0	.0	.0	.0	.0	1.7	.0	2.1	9	3.8
TOTAL	0	0	1	10	34	70	84	36	235	100.0
PCT	.0	.0	.4	4.3	14.5	29.8	35.7	15.3		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	.0	.0	.0	.0	.4	.4	.0	.0	.0	.0
60/64	2.2	.9	.0	.0	2.2	2.0	.9	1.2	.0	1.3
55/59	7.6	1.4	.3	.1	10.1	6.1	6.6	4.5	.0	1.3
50/54	3.9	.9	.0	1.0	13.5	12.6	8.7	5.9	.0	.4
45/49	.0	.0	.0	.4	1.7	.9	.4	.4	.0	.0
TOTAL	13.7	3.1	.3	1.5	28.0	21.9	16.6	11.9	.0	3.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	64	61	59	54	49	47	46	53.8	350
06009	64	60	57	53	48	46	43	52.7	627
12015	63	60	59	54	49	47	46	54.1	316
18021	70	65	62	56	51	47	46	55.8	624
TOT	70	63	60	54	49	46	43	54.1	1917

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.7	6.9	32.8	41.4	17.2	82	58
06009	.0	3.3	5.0	21.7	43.3	26.7	84	60
12015	.0	4.8	21.0	29.0	37.1	8.1	77	62
18021	.0	9.7	22.6	32.3	24.2	11.3	75	62
TOT	0	12	34	70	88	38	80	242

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	69 72	TOT	N FOG	NO FOG
14/16	.0	.0	.0	.0	.0	.4	.4	2	.0	.9
11/13	.0	.0	.0	.9	.0	.4	.0	3	.0	1.3
9/10	.0	.0	.0	.9	.4	.4	.0	4	.0	1.7
7/8	.0	.0	.0	.9	2.2	.0	.0	7	.0	3.0
6	.0	.0	.9	2.6	1.3	.0	.0	11	.9	3.9
5	.0	.0	.4	2.6	1.3	.0	.0	10	.0	4.3
4	.4	.0	1.3	3.0	1.7	.0	.0	15	.4	6.1
3	.0	.0	2.6	3.0	.4	.0	.0	14	.0	6.1
2	.4	.0	2.2	3.2	.4	.0	.0	19	.4	7.8
1	.0	1.7	4.3	3.9	.0	.0	.0	23	.0	10.0
0	.0	1.3	9.5	4.8	.0	.0	.0	36	.0	15.6
-1	.0	2.2	7.8	2.2	.0	.0	.0	28	.0	12.1
-2	.0	4.3	4.3	.9	.4	.0	.0	23	.0	10.0
-3	.4	2.6	4.3	.4	.0	.0	.0	18	.0	7.8
-4	.4	1.7	1.3	.4	.0	.0	.0	9	.0	3.9
-5	.0	1.7	1.3	.4	.0	.0	.0	8	.0	3.5
-11/-13	.4	.0	.0	.0	.0	.0	.0	1	.0	.4
TOTAL	5	.0	93	19	3	1	1	231	4	227
PCT	2.2	15.6	40.3	32.0	8.2	1.3	.4	100.0	1.7	98.3

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							PCT	NE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.9	.7	2.7	.0	.0	.0	4.3	.0	.9	.0	.0	.0	.0	.0	.0	.9
3-4	.0	.7	.0	.0	.0	.0	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.9
5-6	.0	.0	3.6	.0	.0	.0	3.6	.0	.0	.0	.0	.0	.0	.0	.0	.9
7	.0	.0	5.2	.0	.0	.0	5.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	1.6	.0	.0	1.6	.0	.0	.0	.0	.2	.0	.0	.0	.2
10-11	.0	.0	.0	.9	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.9	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.6	1.4	11.6	3.4	.0	.0	18.0	.0	.9	.0	.0	.2	.9	.0	.0	2.0

HGT	E							PCT	SE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.7

PERIOD: (OVER-ALL) 1963-1977

NOVEMBER

AREA 0027 VALDIVIA
40.45 74.6W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
41	.0	.0	.0	.0	.0	.0	.0	.9	1.8	.0	.0	.0	.0	.0	2.7
1-2	.0	5.5	3.9	.0	.0	.0	9.3	.0	.9	1.4	.0	.0	.0	.0	2.3
3-4	.0	5.0	2.4	.0	.0	.0	7.3	.0	4.1	4.1	.2	.0	.0	.0	8.4
5-6	.0	.0	3.2	.0	.0	.0	3.2	.0	1.1	2.0	.0	.0	.0	.0	3.2
7	.0	.0	3.7	.0	.0	.0	3.7	.0	.0	1.1	.0	.0	.0	.0	1.1
8-9	.0	.0	.0	1.8	.0	.0	1.8	.0	.9	2.7	.0	.0	.0	.0	3.6
10-11	.0	.0	.7	.9	.0	.0	1.6	.0	.0	.2	.0	.0	.0	.0	.2
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	10.5	13.2	2.7	.0	.0	26.4	.9	8.9	11.6	.2	.0	.0	.0	21.6

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
41	.0	.9	.0	.0	.0	.0	.9	.2	1.8	.0	.0	.0	.0	.0	2.0
1-2	.9	3.6	5.7	.0	.0	.0	9.8	.9	1.1	.2	.0	.0	.0	.0	2.3
3-4	.0	.0	2.7	.7	.0	.0	3.4	.0	1.1	2.7	.0	.0	.0	.0	3.9
5-6	.0	.7	.0	.0	.0	.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	1.8	.0	.0	.0	1.8	.0	.0	.2	.0	.0	.0	.0	.2
8-9	.0	.0	.0	.9	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.9
12	.0	.0	.0	.0	1.8	.0	1.8	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.9	5.2	10.7	1.6	1.8	.0	20.2	1.1	4.1	3.2	.9	.0	.0	.0	9.3

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	3.6	4.5	.0	.0	.0	.0	8.1	
1-2	2.7	13.5	13.5	.0	.0	.0	29.7	
3-4	.0	10.8	11.7	.9	.0	.0	23.4	
5-6	.0	1.8	9.9	.0	.9	.0	12.6	
7	.0	.0	11.7	.0	.0	.0	11.7	
8-9	.0	.9	2.7	4.5	.0	.0	8.1	
10-11	.0	.0	.9	2.7	.0	.0	3.6	
12	.0	.0	.0	.0	1.8	.0	1.8	
13-16	.0	.0	.0	.9	.0	.0	.9	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	6.3	31.5	50.5	9.0	2.7	.0	100.0	111

PERIOD: (OVER-ALL) 1951-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
4-6	1.1	6.5	8.1	4.3	1.6	.5	.5	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	44	4
6-7	.0	.5	5.4	8.1	5.4	2.7	4.8	1.6	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	54	7
8-9	.0	.0	5.4	2.2	6.5	3.8	2.7	2.7	1.1	.5	.0	.0	.5	.0	.0	.0	.0	.0	.0	47	8
10-11	.0	.0	.0	1.6	1.1	2.7	.5	1.1	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	8
12-13	.0	.0	.5	.0	1.6	1.1	2.8	1.6	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	17	9
13	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	8
INDET	.5	.5	1.1	.0	.0	1.1	.5	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	6
TOTAL	3	14	38	30	30	23	24	17	5	1	0	0	1	0	0	0	0	0	0	188	7
PCT	1.6	7.5	20.4	16.1	16.1	12.4	12.9	9.1	2.7	.5	.0	.0	.5	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1868-1977

DECEMBER

AREA 0027 VALDIVIA
40.55 74.6W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG MO PCPN	FOG MO PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	18.1	3.1	11.8	.0	.0	.0	.0	33.1	4.7	.0	2.4	.0	.0	.0	59.8
NE	.0	.0	.0	.0	.0	.0	.0	.0	29.0	.0	.0	.0	.0	.0	71.0
E	.0	.0	23.5	.0	.0	.0	.0	23.5	.0	.0	.0	.0	.0	.0	76.5
SE	.0	9.1	9.1	.0	.0	.0	.0	18.2	.0	.0	9.1	.0	.0	.0	72.7
S	.0	.9	.9	.0	.0	.0	.0	1.8	.0	.0	1.8	.0	1.8	.0	94.7
SW	.8	.0	3.1	.0	.0	.0	.0	3.9	.4	.0	1.6	.0	.0	.0	94.1
W	1.0	2.0	1.5	.0	.0	.0	.0	4.6	3.0	.0	5.6	.0	.0	.0	86.6
NW	.6	.0	5.8	.0	.0	.0	.0	6.4	5.8	.0	1.2	2.3	.0	.0	84.2
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	2.1	1.2	3.7	.0	.0	.0	.0	7.0	2.4	.0	2.4	.3	.6	.0	87.2
TOT OBS:	327														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG MO PCPN	FOG MO PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
0000Z	2.3	.0	4.6	.0	.0	.0	.0	6.9	2.3	.0	.0	.0	1.1	.0	89.7
0600Z	1.3	2.5	2.5	.0	.0	.0	.0	6.3	2.5	.0	1.3	.0	1.3	.0	88.8
1201Z	2.5	1.3	2.5	.0	.0	.0	.0	6.3	2.5	.0	6.3	1.3	.0	.0	83.5
1802Z	2.3	1.2	4.7	.0	.0	.0	.0	8.1	2.3	.0	2.3	.0	.0	.0	87.2
TOT PCT	2.1	1.2	3.6	.0	.0	.0	.0	6.9	2.4	.0	2.4	.3	.6	.0	87.3
TOT OBS:	332														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WNO DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	1.1	2.7	2.6	1.1	.1	.0		7.7	12.2	5.9	5.4	7.1	6.1	8.4	.0	10.6	6.7	
NE	.2	.6	.5	.0	.0	.0		1.3	9.3	1.2	1.8	.4	1.0	2.2	.0	1.6	1.0	
E	.2	.4	.0	.0	.0	.0		.6	5.4	.4	7.1	.5	.8	.8	.0	.4	.4	
SE	.3	2.1	1.8	.5	.0	.0		4.7	11.6	2.8	.0	4.9	7.1	7.2	10.4	3.3	3.6	
S	1.8	10.7	12.6	3.0	.4	.0		28.6	12.8	29.3	50.0	29.7	27.0	30.2	52.1	25.5	30.0	
SW	1.3	9.9	7.2	1.4	.2	.0		20.0	11.4	24.7	21.4	19.9	17.5	18.6	6.3	18.0	22.9	
W	1.6	7.3	6.6	2.0	.3	.1		17.9	12.6	16.8	.0	16.4	19.3	15.4	14.6	20.6	19.1	
NW	1.4	6.6	6.3	1.6	.4	.1		16.4	12.8	16.0	14.3	16.2	16.8	14.6	16.7	18.4	13.7	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	2.8	.0	.0	.0	.0	.0		2.8	.0	3.0	.0	4.9	4.5	2.5	.0	1.5	.7	
TOT OBS	236	902	842	215	32	3	2230		11.9	367	14	370	314	353	12	520	280	
TOT PCT	10.6	40.4	37.8	9.6	1.4	.1		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	06	12	18	21
N	2.4	3.2	1.4	.6	.0		7.7	12.2	5.8	6.6	8.1	9.3	
NE	.5	.6	.2	.0	.0		1.3	9.3	1.2	.7	2.1	1.4	
E	.4	.2	.0	.0	.0		.6	5.4	.7	.7	.8	.4	
SE	1.3	2.3	.9	.2	.0		4.7	11.6	2.7	5.9	7.3	3.4	
S	6.5	12.6	7.1	1.4	.0		28.6	12.8	30.1	28.5	30.9	27.1	
SW	5.3	10.7	3.3	.7	.0		20.0	11.4	24.5	18.8	18.2	19.7	
W	3.9	9.0	4.0	.9	.1		17.9	12.6	16.1	17.7	15.4	20.1	
NW	3.8	7.7	4.0	.7	.2		16.4	12.8	15.9	16.5	14.7	17.5	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	2.8	.0	.0	.0	.0		2.8	.0	2.9	4.7	2.5	1.3	
TOT OBS	600	1056	464	101	9	2230		11.9	381	684	365	800	
TOT PCT	26.9	47.4	20.8	4.5	.4		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1868-1977

DECEMBER

AREA 0027 VALDIVIA
40.55 74.6W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	2.9	8.1	39.1	38.1	10.0	1.3	.5	12.3	100.0	381
0600Z	4.7	8.0	43.0	34.1	8.6	1.5	.1	11.3	100.0	684
1200Z	2.5	8.8	40.0	38.6	9.0	1.1	.0	11.5	100.0	365
1800Z	1.3	7.0	39.1	40.4	10.6	1.6	.0	12.5	100.0	800
TOT	62	174	902	842	215	32	3	11.9		2230
PCT	2.8	7.8	40.4	37.8	9.6	1.4	.1	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	1.6	.3	2.0	5.1		6.2
NE	.4	.4	.4	1.5		6.1
E	.2	.0	.4	1.0		6.9
SE	.8	.5	1.1	.9		4.9
S	14.2	5.4	10.1	4.1		3.5
SW	5.4	2.9	6.8	5.1		4.8
W	1.7	.9	6.8	5.6		6.3
NW	1.5	1.5	3.2	6.7		6.2
VAR	.0	.0	.0	.0		.0
CALM	.4	.0	.7	.4		5.2
TOT OBS	73	33	88	85	279	5.0
TOT PCT	26.2	11.8	31.5	30.5	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NM >4/8)
AND OCCURRENCE OF NM <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	1.0	.0	.3	.0	1.8	2.0	.4	.0	.0	.4	3.2	
NE	.0	.0	.0	.4	.8	.4	.0	.0	.0	.0	1.3	
E	.0	.0	.0	.0	.6	.4	.0	.0	.0	.0	.5	
SE	.4	.0	.0	.8	.2	.6	.0	.0	.0	.0	1.3	
S	.7	.0	.4	1.5	4.5	1.9	.0	.7	.0	1.1	23.0	
SW	.0	.0	.4	2.4	2.8	2.5	.7	.4	.0	.0	10.9	
W	.4	.0	.6	2.2	3.2	1.9	.4	.0	.0	.4	6.1	
NW	.1	.0	.1	2.1	2.2	3.7	.4	.0	.0	.4	4.1	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.7	
TOT OBS	7	0	5	26	45	38	5	3	0	7	143	279
TOT PCT	2.5	.0	1.8	9.3	16.1	13.6	1.8	1.1	.0	2.5	51.3	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NM >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >4500	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
= OR >5000	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
= OR >3500	4.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
= OR >2000	13.1	18.4	18.8	18.8	18.8	18.8	18.8	18.8
= OR >1000	24.8	33.7	34.4	34.8	34.8	35.1	35.1	35.1
= OR >600	30.5	42.2	43.6	44.0	44.0	44.3	44.3	44.3
= OR >300	32.3	44.0	45.4	45.7	45.7	46.1	46.1	46.1
= OR >150	32.3	44.0	45.4	45.7	45.7	46.1	46.1	46.1
= OR >0	32.3	44.3	46.8	47.2	47.5	48.2	48.6	48.6
TOTAL	91	125	132	133	134	136	137	137

TOTAL NUMBER OF OBS: 282

PCT FREQ NH <5/8: 51.4

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
	14.5	6.9	12.8	8.6	6.9	5.9	12.2	6.9	23.7	1.6	304

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1868-1977

DECEMBER

AREA 0027 VALDIVIA
40.5S 74.6W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	NO PCP	.0	.0	.0	.3	.3	.0	.0	.0	.0	.0	.6	
	TOT %	.3	.0	.0	.3	.3	.0	.0	.0	.0	.0	.9	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
	TOT %	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
1<2	PCP	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
2<5	PCP	1.5	.0	.0	.0	.3	.5	.4	.1	.0	.0	2.8	
	NO PCP	.0	.0	.0	.0	.3	.0	.5	.4	.0	.0	1.2	
	TOT %	1.5	.0	.0	.0	.6	.5	.9	.5	.0	.0	4.0	
5<10	PCP	.8	.0	.0	.6	.3	.0	.3	.8	.0	.0	2.8	
	NO PCP	1.1	.5	.5	.3	2.1	1.9	2.6	3.5	.0	.0	12.5	
	TOT %	1.9	.5	.5	.9	2.4	1.9	2.9	4.3	.0	.0	15.3	
10+	PCP	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.9	
	NO PCP	5.4	1.9	.5	2.1	30.7	16.9	11.2	8.3	.0	1.2	78.3	
	TOT %	5.7	1.9	.8	2.1	30.7	17.2	11.2	8.3	.0	1.2	79.2	
TOT OBS													327
TOT PCT		9.7	2.4	1.3	3.4	34.3	19.6	15.1	13.1	.0	1.2	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
	22+	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	TOT %	.3	.0	.0	.3	.3	.0	.0	.0	.0	.0	.6	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
	TOT %	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.5	.0	.0	.0	.3	.0	.3	.0	.0	.0	1.0	
	11-21	.3	.0	.0	.0	.5	.7	.5	.7	.0	.0	2.6	
	22+	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	
	TOT %	1.3	.0	.0	.0	.8	.7	.8	.7	.0	.0	4.2	
5<10	0-3	.0	.1	.2	.0	.0	.0	.2	.1	.0	.0	.5	
	4-10	.0	.3	.3	.3	.7	.4	.8	1.8	.0	.0	4.4	
	11-21	1.6	.1	.0	.5	2.2	1.6	.8	2.0	.0	.0	8.9	
	22+	.3	.0	.0	.0	.5	.7	.7	.0	.0	.0	2.1	
	TOT %	1.9	.4	.5	.8	3.3	2.7	2.5	3.9	.0	.0	15.9	
10+	0-3	.0	.5	.0	.0	.9	.2	.5	.8	.0	1.3	4.2	
	4-10	2.5	.0	.7	1.4	10.2	8.1	5.3	4.0	.0	.0	32.1	
	11-21	2.8	1.1	.0	.2	13.6	9.0	4.6	3.3	.0	.0	36.7	
	22+	.3	.0	.0	.3	6.1	.3	.4	.3	.0	.0	7.6	
	TOT %	5.6	1.6	.7	1.8	30.8	17.6	10.8	8.4	.0	1.3	78.6	
TOT OBS													383
TOT PCT		9.3	2.0	1.1	2.9	35.4	20.9	14.0	13.0	.0	1.3	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1808-1977

DECEMBER

AREA 0027 VALDIVIA
40.95 74.6W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM $\geq 4/8$) AND
OCCURRENCE OF NM $< 5/8$ BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM $< 5/8$ ANY MGT	TOTAL OBS
00003	.0	.0	4.0	5.3	14.7	10.7	1.3	1.3	.0	.0	37.3	62.7	75
06009	3.1	.0	.0	7.7	23.1	7.7	4.6	.0	.0	3.1	49.2	50.8	65
12015	5.6	.0	1.4	13.9	15.3	23.6	.0	2.8	.0	1.4	63.9	36.1	72
18021	1.3	.0	1.3	9.1	11.7	10.4	2.6	.0	.0	5.2	41.6	58.4	77
TOT	7	0	5	26	46	38	6	3	0	7	138	151	289
PCT	2.4	.0	1.7	9.0	15.9	13.1	2.1	1.0	.0	2.4	47.8	52.2	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	$< 1/2$	$1/2 < 1$	$1 < 2$	$2 < 5$	$5 < 10$	$10+$	TOTAL OBS
00003	.0	.0	1.0	4.0	16.0	79.0	100
06009	.0	.9	.0	3.7	19.6	75.7	107
12015	3.6	.0	.0	4.8	15.5	76.2	84
18021	.0	.0	.0	4.1	12.4	83.5	97
TOT	3	1	1	16	62	305	388
PCT	.8	.3	.3	4.1	16.0	78.6	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING MGT (FEET, NM $\geq 4/8$) BY HOUR

HOUR (GMT)	< 150 < 500	< 600 < 1	< 1000 < 2	$1000+$ AND $5+$	NM $< 5/8$ AND $5+$	TOTAL OBS
00003	.0	4.1	13.5	25.7	60.8	74
06009	3.1	3.1	10.9	39.1	50.0	64
12015	5.7	8.6	22.9	42.9	34.3	70
18021	1.4	2.7	13.5	28.4	58.1	74
TOT	7	13	43	95	144	282
PCT	2.5	4.6	15.2	33.7	51.1	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
70/74	.0	.0	.4	.0	.4	.0	.0	.0	2	.8
65/69	.0	.0	.0	.0	1.1	.0	1.5	.4	8	3.0
60/64	.0	.0	.0	.8	2.3	6.4	12.4	.8	60	22.6
55/59	.0	.0	.0	.8	6.4	15.0	21.1	11.7	146	54.9
50/54	.0	.0	.4	.8	1.9	4.9	6.0	4.5	49	18.4
45/49	.0	.0	.0	.0	.0	.4	.0	.0	1	.4
TOTAL	0	0	2	6	32	71	104	46	266	100.0
PCT	.0	.0	.8	2.3	12.0	26.7	41.0	17.3		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.3	.1	.4	.0	.0	.0
.0	.0	.0	.1	1.6	.9	.4	.0	.0	.0
2.3	.9	.3	.0	10.0	4.3	1.0	2.9	.0	.8
6.9	1.2	.9	1.6	18.5	9.8	9.1	6.9	.0	.0
3.0	.8	.0	.2	2.5	4.6	3.3	3.3	.0	.8
.0	.0	.0	.0	.0	.1	.3	.0	.0	.0
12.2	2.9	1.2	1.9	32.9	19.8	14.5	13.1	.0	1.5

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	90%	5%	1%	MIN	MEAN	TOTAL OBS
00003	70	65	62	57	52	50	46	57.1	376
06009	65	62	60	55	50	48	46	55.5	682
12015	69	65	62	57	51	49	44	56.8	336
18021	72	68	64	58	53	51	50	58.5	653
TOT	72	65	63	57	52	49	44	56.9	2047

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.4	14.3	24.3	47.1	12.9	80	70		
06009	.0	4.6	6.2	30.8	33.8	24.6	82	65		
12015	.0	4.8	6.5	25.8	41.9	21.0	82	62		
18021	.0	1.4	18.9	28.4	39.2	12.2	79	74		
TOT	0	8	32	74	110	47	31	271		

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PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1868-1977

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40.55 74.6W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	69 72	TOT	N FOG	NO FOG
14/16	.0	.0	.0	.0	.0	.0	.3	1	.3	.0
11/13	.0	.0	.0	.0	.7	.0	.0	2	.0	.7
9/10	.0	.0	.0	.0	.7	.7	1.0	7	.0	2.4
7/8	.0	.0	.0	1.0	1.0	.0	.0	6	.0	2.0
6	.0	.0	.0	.7	1.0	.0	.0	5	.0	1.7
5	.0	.0	.0	.7	2.0	.3	.3	10	.0	3.4
4	.0	.0	.3	1.7	1.4	1.0	.0	13	.0	4.4
3	.0	.0	.7	3.4	2.0	1.7	.0	23	.0	7.8
2	.0	.0	.3	3.4	1.7	1.0	.0	19	.0	6.4
1	.0	.0	4.1	5.1	3.4	.0	.0	37	.3	12.2
0	.0	.7	5.4	10.5	3.0	.0	.0	58	.3	19.3
-1	.3	.0	6.4	6.4	1.4	.0	.0	43	.0	14.5
-2	.0	2.0	4.7	2.0	.3	.0	.0	27	1.0	8.1
-3	.0	.7	2.7	1.7	.7	.0	.0	17	.3	5.4
-4	.0	.7	3.7	.7	.0	.0	.0	15	.3	4.7
-5	.0	.3	1.7	.7	.0	.0	.0	8	.0	2.7
-6	.0	.7	.3	.3	.0	.0	.0	4	.0	1.4
-7/-8	.0	.0	.3	.0	.0	.0	.0	1	.0	.3
TOTAL	1		91		57		5		8	288
PCT	.3	15	113		14		1.7	296	2.7	97.3
		5.1	30.7	38.2	19.3			100.0		

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	1.2	.0	.0	.0	.0	1.2	.2	.0	.0	.0	.0	.0	.2
1-2	.0	1.1	2.1	.0	.0	.0	3.2	.0	.0	2.1	.0	.0	.0	2.1
3-4	.0	.6	1.8	.0	.0	.0	2.5	.0	.6	.6	.0	.0	.0	1.2
5-6	.0	.0	.6	.6	.0	.0	1.2	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.5	1.8	.0	.0	2.3	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.4	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.9	5.3	2.5	.0	.0	10.9	.2	.6	2.8	.0	.0	.0	3.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.5	.6	.0	.0	.0	.0	1.1	.0	.6	.0	.0	.0	.0	.6
1-2	.0	.6	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.6	.2	.0	.0	.0	.8
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.6
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	1.2	.0	.0	.0	.0	1.7	.0	1.2	.3	.6	.0	.0	2.1

PERIOD: (OVER-ALL) 1963-1977

DECEMBER

AREA 0027 VALDIVIA
40.55 74.6W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	1.8	.0	.0	.0	.0	1.8	.0	.0	1.2	.0	.0	.0	1.8	
1-2	.0	3.5	2.0	.0	.0	.0	6.3	.0	4.4	4.4	.0	.0	.0	8.9	
3-4	.0	.6	2.1	.0	.0	.0	2.8	.2	.8	4.0	.2	.0	.0	5.1	
5-6	.0	.5	4.4	.0	.0	.0	4.9	.0	.3	2.3	.2	.0	.0	2.8	
7	.0	.0	.6	3.1	.6	.0	4.3	.0	.0	.2	.0	.0	.0	.2	
8-9	.0	.0	.0	2.9	.0	.0	2.9	.0	.0	.6	.2	.0	.0	.8	
10-11	.0	.0	2.3	2.5	.0	.0	4.8	.0	.0	.2	.2	.0	.0	.3	
12	.0	.0	.0	.0	.6	.0	.6	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	6.4	12.3	8.4	1.2	.0	28.4	.2	6.1	12.9	.6	.0	.0	19.8	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.5	.0	.6	.0	.0	.0	1.1	.2	.0	.0	.0	.0	.0	.2	
1-2	.0	3.7	3.5	.0	.0	.0	7.2	.0	2.0	1.5	.0	.0	.0	3.5	
3-4	.5	1.1	3.4	.5	.0	.0	5.4	.0	1.2	6.9	.0	.0	.0	8.1	
5-6	.0	1.7	.0	.5	.0	.0	2.1	.0	.6	.6	.0	.0	.0	1.2	
7	.0	.0	.9	.6	.0	.0	1.5	.0	.6	.9	.0	.0	.0	1.5	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.5	.5	.0	.0	.9	.0	.0	.2	.0	.0	.0	.2	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.9	6.4	8.9	2.0	.0	.0	18.3	.2	4.4	10.1	.0	.0	.0	14.7	99.4

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	1.8	4.9	1.8	.0	.0	.0	8.6	
1-2	.0	12.3	18.6	.0	.0	.0	31.9	
3-4	.6	5.5	19.0	.6	.0	.0	25.8	
5-6	.0	3.1	8.0	1.2	.0	.0	12.3	
7	.0	.6	3.1	6.1	.6	.0	10.4	
8-9	.0	.0	.6	3.1	.0	.0	3.7	
10-11	.0	.0	3.7	3.1	.0	.0	6.7	
12	.0	.0	.0	.0	.6	.0	.6	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	2.5	29.4	52.8	14.1	1.2	.0	100.0	163

PERIOD: (OVER-ALL) 1954-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.7	7.7	14.0	.4	2.6	1.7	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	69	4
6-7	.0	.9	3.8	8.5	9.4	3.0	4.3	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	72	6
8-9	.0	.9	2.1	1.3	3.8	3.0	3.8	1.7	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	41	8
10-11	.0	.0	3.4	.9	1.3	.4	.9	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	18	5
12-13	.0	.0	1.7	.4	.4	.9	.0	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	7
>13	.0	.0	.4	.4	1.3	.4	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	6
INDET	1.3	.0	.4	.4	.4	.4	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	5
TOTAL	7	22	60	38	43	23	25	11	3	1	0	0	0	0	0	0	0	0	0	235	6
PCT	3.0	9.4	25.5	16.2	19.1	9.8	10.6	4.7	1.3	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1906-1978
(OVER-ALL) 1864-1978

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TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	16.8	2.6	6.6	.0	.0	.0	.0	25.5	8.9	.6	3.7	.0	.3	.0	61.4
NE	11.8	1.1	9.4	.0	.0	.0	.5	22.8	5.2	.0	.5	.0	1.7	.0	69.8
E	10.7	.0	2.8	.0	.0	.0	.0	13.5	3.7	.0	.0	.0	.0	.0	82.8
SE	1.6	2.1	1.6	.0	.0	.0	.0	5.4	1.8	.0	2.3	.0	.0	.0	90.6
S	.6	.6	1.5	.0	.0	.0	.0	3.0	1.5	.2	1.7	.2	.4	.0	92.9
SW	1.4	2.2	3.1	.0	.0	.0	.0	6.7	4.4	.2	.8	.*	.3	.0	87.5
W	5.3	3.8	2.7	.0	.0	.0	.2	11.6	7.5	.4	2.1	.2	.0	.2	77.9
NW	11.0	3.4	6.1	.0	.0	.0	.0	20.6	6.1	.3	3.0	.2	.3	.0	69.7
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.8	.0	.8	.0	.0	.0	.0	1.7	.0	.0	17.3	.0	.0	.0	72.7
TOT PCT	6.8	2.3	3.8	.0	.0	.0	.1	12.8	4.8	.3	2.4	.1	.3	*	79.2
TOT OBS:	2951														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00603	7.0	1.7	3.8	.0	.0	.0	.0	12.3	3.3	.1	2.3	.4	.2	.0	81.3
06609	7.8	1.6	4.4	.0	.0	.0	.0	13.7	4.7	.8	2.2	.0	.4	.0	78.3
12615	7.2	3.5	3.7	.0	.0	.0	.1	14.4	3.8	.0	1.8	.1	.1	.0	77.7
18621	5.6	2.6	3.1	.0	.0	.0	.1	11.4	5.4	.2	3.5	.1	.5	.1	78.7
TOT PCT	7.0	2.3	3.7	.0	.0	.0	.1	13.0	4.8	.3	2.4	.2	.3	*	79.1
TOT OBS:	3016														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	1.0	4.2	4.3	2.3	.7	.1		12.5	14.8	11.8	22.3	12.7	11.8	12.3	22.4	14.2	10.9	
NE	.4	1.7	.9	.3	.1	*		3.4	10.6	2.7	6.5	3.7	4.1	4.1	4.5	3.3	2.3	
E	.5	1.3	.7	.1	*	.0		2.6	8.0	2.0	.6	2.9	3.5	3.2	5.7	2.2	1.6	
SE	.5	3.4	2.9	.7	.1	*		7.6	11.9	5.6	.3	7.4	9.9	10.1	5.9	6.9	5.9	
S	1.5	9.1	10.0	2.7	.3	*		23.6	12.8	25.3	21.3	23.6	23.0	24.2	22.1	21.0	25.5	
SW	1.0	6.8	5.5	1.6	.4	.1		15.4	12.9	17.6	13.9	15.2	13.8	13.6	14.1	14.7	17.9	
W	.9	5.6	5.3	2.3	.6	.1		14.7	14.1	15.0	15.4	13.7	13.9	13.4	13.4	16.1	15.5	
NW	.9	5.8	6.7	3.2	.8	.2		17.6	15.0	17.4	19.6	17.5	16.3	15.9	11.9	19.5	18.4	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	2.8							2.8	.0	2.5	.0	3.4	3.7	3.2	.0	2.1	2.0	
TOT OBS							24688		13.2	4153	65	4219	3591	3971	82	5430	3177	
TOT PCT	9.5	37.8	34.2	13.1	3.0	.5		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	06	12	18	21
N	2.7	4.8	3.3	1.4	.3		12.5	14.8	12.0	12.2	12.5	13.0	
NE	1.2	1.4	.5	.2	*		3.4	10.6	2.8	3.8	4.1	3.0	
E	1.1	1.2	.2	*	*		2.6	8.0	2.0	3.2	3.2	2.0	
SE	2.0	3.7	1.6	.3	*		7.6	11.9	5.6	8.6	10.0	6.5	
S	5.1	11.4	6.0	1.0	.1		23.6	12.8	25.3	23.4	24.2	22.6	
SW	3.7	7.6	3.1	.8	.2		15.4	12.9	17.5	14.5	13.7	15.9	
W	3.1	6.4	3.7	1.2	.3		14.7	14.1	15.0	13.8	13.4	15.9	
NW	3.0	7.6	4.8	1.8	.4		17.6	15.0	17.4	16.9	15.8	19.2	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	2.8						2.8	.0	2.4	3.6	3.1	2.0	
TOT OBS						24688		13.2	4218	7810	4053	8607	
TOT PCT	24.7	44.0	23.2	6.7	1.3		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1906-1978
(OVER-ALL) 1804-1978

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	2.4	6.7	38.4	36.4	12.6	3.1	.3	13.1	100.0	4218
0600Z	3.6	7.1	38.6	35.1	12.2	2.7	.6	12.8	100.0	7810
1200Z	3.1	6.6	38.6	34.9	13.7	2.6	.3	13.0	100.0	4053
1800Z	2.0	6.3	36.4	37.5	14.0	3.3	.5	13.7	100.0	8607
TOT								13.2		24688
PCT	2.8	6.7	37.8	36.2	13.1	3.0	.5	13.2	100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.9	1.0	3.7	9.8		6.8
NE	.3	.2	1.2	2.3		6.5
E	.6	.5	.7	.3		4.4
SE	1.6	1.0	.9	1.1		3.8
S	8.9	4.5	7.1	4.2		4.1
SW	2.7	2.8	6.3	4.3		5.3
W	2.1	2.6	5.6	5.6		5.7
NW	1.2	1.2	4.4	8.4		6.6
VAR	.0	.0	.0	.5		.0
CALM	.7	.4	.5	.5		4.2
TOT OBS					2470	5.4
TOT PCT	18.9	14.3	30.4	36.4	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NM >4/8)
AND OCCURRENCE OF NM <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.8	.3	.8	2.8	4.2	1.5	.5	.2	.1	.2	4.0	
NE	.6	.1	.1	.8	.9	.9	.1	.0	.0	.0	1.2	
E	.0	.0	.0	.0	.4	.1	.0	.0	.0	.0	1.5	
SE	.1	.0	.1	.5	.7	.3	.0	.1	.0	.1	2.7	
S	.2	.1	.5	1.5	3.5	2.1	.6	.2	.1	.2	15.7	
SW	.1	.0	.5	1.6	2.4	2.2	.9	.0	.0	.2	8.3	
W	.4	.0	.7	2.4	2.9	1.9	.6	.1	.0	.1	6.7	
NW	.5	.4	.9	2.4	2.4	2.6	.5	.1	.2	.1	5.0	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.1	.1	.2	.1	.0	.0	.0	.1	1.4	
TOT OBS												2470
TOT PCT	2.1	.8	3.8	12.0	17.7	11.7	3.3	.8	.4	.9	46.5	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	1.2	1.3	1.4	1.4	1.4	2.4	2.4	2.4
= OR >5000	1.8	2.1	2.2	2.2	2.2	2.2	2.2	2.2
= OR >3500	4.0	5.1	5.3	5.4	5.4	5.4	5.4	5.4
= OR >2000	11.9	15.8	16.5	16.7	16.8	17.0	17.0	17.0
= OR >1000	23.6	32.2	33.7	34.2	34.4	34.6	34.7	34.7
= OR >600	30.0	42.5	45.3	46.0	46.4	46.7	46.7	46.7
= OR >300	31.2	45.1	48.8	49.7	50.2	50.6	50.6	50.6
= OR >150	31.4	45.6	49.4	50.5	51.0	51.4	51.4	51.4
= OR >0	31.4	46.0	50.6	52.0	52.8	53.3	53.5	53.5

TOTAL NUMBER OF OBS: 2500

PCT FREQ NH <5/8: 46.5

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
10.4	7.8	9.2	9.8	8.6	8.0	9.1	8.4	27.4	2661

PERIOD: (PRIMARY) 1904-1978
(OVER-ALL) 1864-1978

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.1	*	.0	.0	.0	.0	.1	.2	.0	.0	.4	
	NO PCP	.1	.0	.0	.1	.1	*	.0	.1	.0	*	.4	
	TOT %	.2	*	.0	.1	.1	*	.1	.3	.0	*	.8	
1/2<1	PCP	.3	.1	*	.0	.1	*	*	.1	.0	.0	.6	
	NO PCP	*	*	.0	.0	.1	.1	.1	.1	.0	*	.4	
	TOT %	.4	.1	*	.0	.2	.1	.1	.1	.0	*	1.0	
1<2	PCP	.5	.1	.0	.0	.1	.1	.1	.2	.0	*	1.1	
	NO PCP	.4	.1	.0	*	.2	*	.0	.1	.0	.0	.7	
	TOT %	.9	.1	.0	*	.2	.1	.1	.2	.0	*	1.7	
2<5	PCP	.8	.2	*	*	.1	.3	.5	.8	.0	.0	2.8	
	NO PCP	1.1	.2	*	.2	.2	.1	.3	.4	.0	.1	2.6	
	TOT %	1.9	.4	.1	.2	.3	.4	.8	1.2	.0	.1	5.3	
5<10	PCP	2.1	.6	.1	.1	.3	.4	.6	1.7	.0	*	5.7	
	NO PCP	2.9	.5	.2	.5	2.9	2.3	2.3	3.2	.0	.2	15.1	
	TOT %	5.0	1.1	.3	.6	3.3	2.7	2.8	4.9	.0	.3	20.9	
10+	PCP	.5	.1	*	.2	.2	.4	.4	.4	.0	.0	2.3	
	NO PCP	7.4	2.4	1.9	3.8	19.7	12.6	11.0	7.7	.0	1.6	68.0	
	TOT %	7.9	2.5	1.9	4.0	19.9	12.9	11.4	8.1	.0	1.6	70.2	
TOT OBS		2927											
TOT PCT		16.2	4.2	2.3	4.6	24.0	16.2	15.3	14.9	.0	2.1	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	*	.0	.0	*	*	.0	.1	.1	
	4-10	*	.0	.0	*	.1	.1	*	.1	.0	.0	.3	
	11-21	*	.0	.0	.0	*	*	*	.1	.0	.0	.2	
	22+	.1	*	.0	.0	.0	.0	.0	.1	.0	.0	.2	
	TOT %	.1	*	.0	.1	.1	.1	.1	.3	.0	.1	.8	
1/2<1	0-3	*	*	.0	.0	.0	*	*	*	.0	*	.1	
	4-10	.1	*	.0	.0	*	*	.0	*	.0	.0	.2	
	11-21	.1	*	*	.0	.1	*	.1	*	.0	.0	.3	
	22+	.2	*	.0	.0	*	.0	.0	*	.0	.0	.3	
	TOT %	.3	.1	*	.0	.1	.1	.1	.1	.0	*	.8	
1<2	0-3	*	.0	.0	.0	*	*	.0	*	.0	.1	.2	
	4-10	.2	.0	.0	.0	.1	*	.1	.0	.0	.0	.4	
	11-21	.3	.0	.0	*	*	*	.1	.1	.0	.0	.5	
	22+	.2	.1	.0	*	*	.0	*	.1	.0	.0	.5	
	TOT %	.7	.1	.0	*	.2	.1	.2	.3	.0	.1	1.6	
2<5	0-3	.1	.0	.0	.0	*	.0	*	.1	.0	.2	.4	
	4-10	.3	.1	*	*	.1	.2	.2	.1	.0	.0	1.0	
	11-21	.8	.1	*	.1	.1	.2	.3	.6	.0	.0	2.2	
	22+	.8	.2	*	*	.1	.1	.2	.4	.0	.0	1.8	
	TOT %	2.0	.4	.1	.2	.4	.4	.8	1.1	.0	.2	5.5	
5<10	0-3	.2	.1	.1	*	*	.2	.1	.1	.0	.4	1.2	
	4-10	.8	.2	.1	.2	.8	1.0	.9	1.4	.0	.0	3.4	
	11-21	1.9	.4	.1	.3	1.9	1.1	1.3	2.0	.0	.0	9.0	
	22+	1.8	.3	.0	*	.4	.4	.4	1.1	.0	.0	4.4	
	TOT %	4.7	1.0	.3	.6	3.2	2.8	2.7	4.5	.0	.4	20.1	
10+	0-3	.4	.3	.3	.3	.8	.5	.5	.3	.0	2.0	5.5	
	4-10	3.1	.9	1.0	2.2	6.9	6.0	4.4	3.1	.0	.0	27.6	
	11-21	2.8	.9	.5	1.4	9.9	5.7	4.6	3.4	.0	.0	29.3	
	22+	1.3	.3	*	.3	3.2	1.2	1.4	1.1	.0	.0	8.7	
	TOT %	7.6	2.4	1.8	4.2	20.8	13.5	10.8	7.9	.0	2.0	71.1	
TOT OBS		3728											
TOT PCT		15.5	4.0	2.3	5.0	24.8	16.8	14.6	14.2	.0	2.8	100.0	

PERIOD: (PRIMARY) 1906-1978
(OVER-ALL) 1864-1978

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	1.8	.4	4.1	11.2	18.3	8.8	2.7	.9	.2	.9	49.4	50.6	635
06009	2.0	.4	4.4	11.7	17.2	9.1	3.0	.0	.3	1.0	49.0	51.0	589
12015	2.1	1.7	3.7	12.6	19.5	14.9	3.5	1.1	.6	.3	59.9	40.1	679
18021	2.4	.8	2.8	11.8	14.3	12.4	3.8	1.1	.6	1.6	51.6	48.4	658
TOT PCT	2.0	.8	3.7	11.8	17.3	11.4	3.3	.8	.4	.9	52.5	47.5	2561 100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.6	.9	1.4	4.7	21.3	71.0	895
06009	.9	.7	1.0	5.4	21.3	70.6	1061
12015	1.0	.5	2.1	5.2	19.4	71.8	872
18021	.7	1.2	2.2	6.8	18.3	70.7	959
TOT PCT	.8	.8	1.7	5.5	20.1	71.1	3787 100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	1.9	7.0	21.0	29.3	49.7	621
06009	2.0	8.3	21.1	29.4	49.5	574
12015	2.2	8.2	23.2	38.7	38.1	660
18021	2.5	7.0	22.6	30.8	46.6	645
TOT PCT	2.1	7.6	21.9	32.2	45.9	2500 100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
75/79	.0	.0	.0	*	.0	.0	.0	.0	*	*
70/74	.0	.0	.1	.1	.1	.1	.1	.0	.4	.4
65/69	.0	.0	*	.2	.5	.3	.7	.3	1.9	1.9
60/64	.0	.0	.1	.6	2.0	4.4	5.1	2.6	14.7	14.7
55/59	.0	.0	.4	.9	3.3	9.3	11.6	7.9	33.3	33.3
50/54	.0	.0	.2	.9	5.3	8.6	12.1	7.9	34.9	34.9
45/49	.0	.0	.1	1.1	1.7	4.0	4.8	1.8	13.5	13.5
40/44	.0	.0	.0	*	.3	.3	.3	.3	1.2	1.2
35/39	.0	.0	.0	.0	.0	.0	*	.0	*	*
TOTAL PCT	.0	.0	.9	3.8	13.1	27.0	34.6	20.7	2717	100.0

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
75/79	.0	.0	.0	.0	.0	.0	*	.0	.0	.0
70/74	*	*	.1	*	.2	*	.1	.1	.0	.0
65/69	.2	*	*	.1	.6	.4	.3	.1	.0	.1
60/64	2.2	.5	.1	.2	4.3	2.8	2.0	2.3	.0	.3
55/59	5.6	1.6	.6	.9	8.3	5.0	5.4	5.3	.0	.7
50/54	6.7	1.5	1.0	1.5	6.8	4.9	5.6	6.2	.0	.8
45/49	1.0	.5	.8	1.8	3.2	2.4	2.4	1.3	.0	.2
40/44	*	*	.1	.4	.3	.1	.1	.1	.0	*
35/39	.0	.0	.0	.0	.0	.0	*	.0	.0	.0
TOTAL	15.8	4.0	2.7	4.9	23.6	15.5	15.9	15.4	.0	2.1

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	76	61	59	54	49	47	39	54.1	4191
06009	76	60	58	53	48	45	38	53.0	7805
12015	73	61	59	54	48	45	37	53.8	3913
18021	77	64	61	55	50	47	41	55.3	7576
TOT	77	62	60	54	49	46	37	54.0	23485

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	3.3	12.8	28.8	35.3	19.8	80	729	729	729
06009	.0	3.7	9.5	24.1	35.9	26.8	82	681	681	681
12015	.0	4.0	12.8	26.1	34.9	22.2	80	712	712	712
18021	.0	7.6	16.8	27.6	32.6	15.4	78	701	701	701
TOT	0	128	372	753	983	584	80	2620	2620	2620

PERIOD: (PRIMARY) 1906-1978
(OVER-ALL) 1864-1978

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37 40	41 44	45 48	49 52	53 56	57 60	61 64	65 68	69 72	73 76	TOT	W FOG	WD FOG
14/16	.0	.0	.0	.0	.0	.0	.1	.1	.1		10	*	.3
11/13	.0	.0	.0	.0	.1	.1	.1	.2	.1		17	.0	.6
9/10	.0	.0	.0	.1	.3	.2	.2	.2	*		36	.1	1.2
7/8	.0	.0	.0	.1	.3	.0	.7	.2	.1	.0	58	.2	1.8
6	.0	.0	.0	*	.1	.5	.5	.2	.0	.0	38	.1	1.2
5	.0	.0	.0	.0	.6	1.3	.8	.2	.1	.0	83	.1	2.9
4	.0	.0	.2	*	1.0	1.6	1.0	.1	.0	.0	107	.1	3.7
3	.0	.0	.1	.1	1.6	2.6	1.0	.4	.0	.0	161	.1	5.7
2	.0	.0	.1	.8	2.8	2.6	1.2	.2	*	.0	214	.4	7.4
1	.0	.0	.1	1.3	3.2	2.9	1.6	.1	.0	.0	266	.1	9.1
0	.0	.0	.1	2.1	5.0	4.2	1.4	.1	.0	.0	387	.6	13.3
-1	.0	.0	.3	2.7	4.7	3.1	.9	.0	.0	.0	355	.1	12.7
-2	.0	*	1.0	4.7	3.9	1.8	.6	*	.0	.0	329	.4	11.8
-3	.0	*	1.1	2.9	2.3	1.4	.3	.0	.0	.0	237	.2	8.8
-4	.0	*	1.9	2.4	1.7	.6	.1	.0	.0	.0	172	.1	6.6
-5	.0	.1	1.9	2.0	1.0	.4	.0	.0	.0	.0	138	.0	5.5
-6	.0	.1	.8	.8	.2	.1	.0	.0	.0	.0	49	*	1.9
-7/-8	.0	.6	.8	.3	.3	.2	.0	.0	.0	.0	53	.0	2.2
-9/-10	.0	.0	.3	.3	*	.1	.0	.0	.0	.0	18	.0	.7
-11/-13	*	*	.1	*	.0	.0	.0	.0	.0	.0	5	.0	.2
-14/-16	.1	*	.0	.0	.0	.0	.0	.0	.0	.0	2	.0	.1
TOTAL											2735		
PCT	.1	1.0	8.7	23.5	28.9	24.5	10.4	2.1	.6	.2	100.0	2.6	97.4

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							PCT	NE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.1	.5	.1	.0	.0	.0	.7		.1	.4	.1	.0	.0	.0	.0	.6
1-2	.2	1.2	1.1	.0	.0	.0	2.5		.1	.3	.2	.0	.0	.0	.0	.6
3-4	*	1.5	1.2	.4	.0	.0	3.1		.0	.2	.5	.1	.0	.0	.0	.8
5-6	.0	.4	1.0	.6	.0	.0	2.9		.0	.3	.3	.1	.1	.0	.0	.9
7	.0	.0	1.4	.8	.2	.0	2.3		.1	.0	.2	.2	.0	.0	.0	.5
8-9	.0	.0	.4	1.4	.0	.0	1.7		.0	.0	.1	.2	.0	.0	.0	.3
10-11	.0	.0	.1	.8	.2	.0	1.0		.0	.0	.0	.1	.2	.0	.0	.3
12	.0	.0	.0	.1	.1	.0	.2		.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.1	.2	.0	.0	.3		.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.1	.0	.0	.1
20-22	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.4	3.6	6.1	4.2	.4	.0	14.8		.3	1.2	1.4	.8	.3	.0	.0	3.9

HGT	E							PCT	SE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.3	.2	.0	.0	.0	.0	.5		.3	.3	*	.0	.0	.0	.0	.6
1-2	.1	.7	.3	.0	.0	.0	1.0		.1	1.0	.4	.0	.0	.0	.0	1.5
3-4	.0	.2	.4	.0	.0	.0	.6		.0	.5	.4	.0	.0	.0	.0	.9
5-6	.0	.0	.0	.1	.0	.0	.1		.0	.0	.2	.3	.1	.0	.0	.6
7	*	.0	.0	.0	.0	.0	*		.0	.0	*	.1	.0	.0	.0	.2
8-9	.0	.0	.0	.0	.0	.0	.0		.0	.0	.1	.2	.0	.0	.0	.3
10-11	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.1	.0	.0	.0	.1
12	.1	.0	.0	.0	.0	.0	.1		.0	.0	*	.0	.0	.0	.0	*
13-16	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	*	.0	.0	*
20-22	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	1.1	.7	.1	.0	.0	2.3		.4	1.8	1.2	.7	.1	.0	.0	4.1

PERIOD: (OVER-ALL) 1963-1978

ANNUAL

AREA 0027 VALDIVIA
40.45 74.5W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.2	1.2	.1	.0	.0	.0	1.4	.2	1.0	.2	.0	.0	.0	1.4
1-2	.3	3.5	2.3	.0	.0	.0	6.0	.6	2.4	1.5	.0	.0	.0	4.4
3-4	.0	1.9	3.6	.4	.0	.0	5.8	.*	2.1	2.1	.3	.0	.0	4.5
5-6	.1	.5	2.9	.7	.0	.0	4.3	.1	1.0	2.1	.3	.0	.0	3.4
7	.1	.3	2.3	.8	.1	.0	3.6	.*	.3	.8	.8	.0	.0	2.0
8-9	.0	.1	.7	1.0	.0	.0	1.8	.0	.2	.5	.2	.0	.0	.9
10-11	.1	.0	.7	.8	.0	.0	1.6	.0	.*	.2	.1	.0	.0	.3
12	.0	.1	.0	.3	.1	.0	.4	.0	.*	.1	.0	.0	.0	.1
13-16	.0	.0	.1	.1	.0	.0	.1	.0	.0	.*	.0	.0	.0	.*
17-19	.0	.1	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.7	7.6	12.4	6.1	.2	.0	24.9	.9	7.0	7.5	1.7	.0	.0	17.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.2	.7	.1	.0	.0	.0	1.0	.1	.5	.2	.0	.0	.0	.8	
1-2	.1	2.3	1.6	.0	.0	.0	3.9	.2	1.7	.8	.0	.0	.0	2.7	
3-4	.1	1.4	2.8	.1	.0	.0	4.4	.*	1.3	3.3	.1	.0	.0	4.8	
5-6	.0	.5	1.6	.4	.0	.0	2.5	.2	.1	1.8	.3	.1	.0	2.5	
7	.0	.3	1.1	.3	.0	.0	1.8	.0	.2	1.0	.4	.0	.0	1.6	
8-9	.0	.0	.3	.6	.0	.0	.8	.0	.1	.3	.8	.0	.0	1.2	
10-11	.0	.1	.1	.6	.0	.0	.8	.0	.1	.2	1.0	.0	.0	1.2	
12	.0	.1	.1	.1	.2	.0	.4	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.2	.2	.0	.0	.4	.0	.0	.1	.1	.0	.0	.2	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.4	5.4	7.8	2.2	.2	.0	16.0	.5	4.0	7.7	2.8	.1	.0	13.0	98.1

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	3.4	4.7	.8	.0	.0	.0	8.9	
1-2	1.6	13.1	8.0	.0	.0	.0	22.7	
3-4	.2	9.1	14.3	1.3	.0	.0	24.9	
5-6	.5	2.8	10.8	2.8	.2	.0	17.1	
7	.3	1.2	6.8	3.5	.2	.0	12.0	
8-9	.0	.3	2.0	4.3	.0	.0	6.5	
10-11	.1	.2	1.3	3.3	.4	.0	5.3	
12	.1	.2	.1	.5	.3	.0	1.3	
13-16	.0	.0	.4	.6	.0	.0	1.0	
17-19	.0	.0	.1	.1	.0	.0	.3	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	6.1	31.6	44.6	16.5	1.2	.0	100.0	1380

PERIOD: (OVER-ALL) 1952-1976

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.2	6.2	7.9	4.3	2.7	1.9	.7	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	566
6-7	.0	1.3	3.8	6.8	6.4	3.8	2.6	1.5	.7	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	576
8-9	.0	1.1	2.2	2.8	5.5	3.0	3.2	1.3	.9	.9	.1	.*	.*	.0	.0	.0	.0	.0	.0	.0	450
10-11	.0	.4	.6	1.5	1.3	2.4	2.3	1.6	.6	.3	.5	.2	.1	.0	.0	.0	.0	.0	.0	.0	237
12-13	.0	.0	.8	.5	.5	.7	.9	.9	.6	.1	.1	.*	.*	.0	.0	.0	.0	.0	.0	.0	106
>13	.0	.0	.0	.6	.7	.6	.6	.3	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	72
INDET	1.4	.4	.6	.5	.8	.6	.6	.4	.3	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	135
TOTAL																					2142
PCT	2.6	9.3	15.8	17.0	17.8	13.0	11.0	6.3	4.1	2.1	.7	.2	.1	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1906-1978
(OVER-ALL) 1864-1978

TABLE 20

AREA 0027, VALDIVIA
40.45 74.5W

PERCENT FREQUENCY OF OCCURRENCE OF SEA TEMP (DEG F) BY MONTH															
SEA TMP DEG F	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	PCT	
96+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
95/96	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
93/94	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
91/92	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
89/90	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
87/88	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
85/86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
83/84	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
81/82	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
79/80	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
77/78	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
75/76	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
73/74	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
71/72	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
69/70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
67/68	.2	.3	1.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	41	.2	
65/66	.8	1.3	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	92	.4	
63/64	6.6	7.9	6.4	1.4	.0	.0	.0	.0	.0	.0	.0	1.3	504	2.1	
61/62	14.2	16.7	11.5	6.4	.6	.1	.1	.0	.1	.3	.6	7.3	1222	5.0	
59/60	24.7	25.4	20.4	14.5	4.3	.7	.5	.2	.1	.2	3.1	17.2	2350	9.6	
57/58	27.0	23.5	23.1	20.5	14.9	4.9	1.0	.4	.3	1.1	9.9	25.4	3192	13.1	
55/56	16.3	16.9	21.6	29.8	31.4	19.7	6.4	2.1	2.9	11.9	31.3	28.5	4499	18.4	
53/54	4.9	5.6	9.4	18.6	28.2	31.5	24.4	12.3	16.0	32.3	31.3	13.7	4610	18.9	
51/52	2.6	1.8	4.0	6.5	15.4	28.2	36.0	38.7	37.9	34.5	19.0	4.9	4540	18.6	
49/50	.6	.4	.6	1.5	4.4	11.7	26.3	36.1	32.2	17.1	4.2	1.1	2681	11.0	
47/48	.1	.3	.1	.8	.6	2.8	4.6	8.3	8.8	2.0	.4	.1	362	2.3	
45/46	.0	.0	.0	.0	.1	.4	.7	1.7	1.7	.3	.1	.1	101	.4	
43/44	.0	.0	.0	.0	.0	.1	.1	.1	.1	.1	.1	.1	9	.1	
41/42	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1	
39/40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1	
37/38	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
35/36	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
33/34	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
31/32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
29/30	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
27/28	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
<27	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	
TOTAL	2024	1983	2485	1981	2082	1742	1912	2040	1912	2093	2003	2148	24405	100.0	
MEAN	58.1	58.5	57.8	56.1	54.4	52.9	51.6	50.7	50.9	52.3	54.1	56.7	54.5		

TABLE 21

PRESSURE (MB)

AVERAGE BY HOUR (GMT)											TOTAL
MO	0000	0300	0600	0900	1200	1500	1800	2100	MEAN		OBS
JAN	1017	1016	1016	1016	1016	1017	1016	1016	1016		790
FEB	1016	1014	1016	1015	1017	1015	1016	1015	1016		589
MAR	1016	1018	1016	1016	1016	1019	1016	1017	1016		782
APR	1015	1022	1016	1015	1016	1020	1016	1014	1016		687
MAY	1017	1005	1016	1016	1015	1002	1015	1016	1016		592
JUN	1015	1004	1016	1015	1015	1007	1014	1016	1014		545
JUL	1016	1009	1017	1017	1017	1012	1015	1017	1016		703
AUG	1017	1019	1018	1016	1016	1023	1017	1014	1017		674
SEP	1019	1015	1019	1018	1019	1020	1018	1018	1018		718
OCT	1018	1019	1018	1017	1018	1023	1019	1018	1018		635
NOV	1018	1016	1017	1018	1018	1020	1018	1018	1018		664
DEC	1017	1019	1016	1015	1016	1018	1016	1015	1016		835
ANN	1017	1015	1017	1016	1017	1016	1016	1016	1017		8214
OBS	1418	68	1380	791	1372	76	2395	714			

PERCENTILES

MO	MIN	1%	5%	25%	50%	75%	95%	99%	MAX
JAN	999	1001	1007	1014	1017	1020	1023	1025	1028
FEB	997	1002	1007	1013	1016	1019	1024	1027	1030
MAR	996	1001	1007	1014	1017	1020	1023	1027	1031
APR	995	997	1002	1012	1017	1020	1023	1029	1031
MAY	994	998	1002	1011	1016	1021	1026	1031	1032
JUN	993	996	998	1009	1015	1021	1027	1028	1033
JUL	994	996	1001	1012	1017	1022	1028	1032	1034
AUG	993	996	1001	1011	1018	1023	1029	1033	1034
SEP	991	997	1003	1014	1019	1024	1029	1032	1034
OCT	997	999	1007	1015	1019	1022	1027	1029	1030
NOV	1003	1005	1009	1015	1018	1021	1026	1028	1031
DEC	998	999	1007	1013	1017	1020	1024	1027	1030

PERIOD: (PRIMARY) 1909-1978
(OVER-ALL) 1861-1978

JANUARY

AREA 0028 VALPARAISO
34.55 72.9W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
N	.0	.0	2.8	.0	.0	.0	.0	2.8	3.7	.0	.0	3.7	13.1	.0	76.6
NE	9.3	.0	5.8	.0	.0	.0	.0	10.5	.0	.0	9.3	.0	4.7	.0	75.6
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.0	1.0	.0	.0	.0	.0	1.0	.0	.0	.0	.0	1.0	.0	95.8
S	.0	.4	1.0	.0	.0	.0	.0	1.4	.4	1.1	1.8	.0	2.7	.0	92.6
SW	.0	.0	1.2	.0	.0	.0	.0	1.2	.0	.0	3.4	.6	3.3	.0	91.5
W	.0	.0	3.4	.0	.0	.0	.0	3.4	.0	.0	3.4	.0	.0	.0	93.2
NW	.0	.0	3.1	.0	.0	.0	.0	3.1	.0	.0	6.2	.0	1.5	.0	89.2
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.1	2.7	.0	2.7	.0	86.5
TOT PCT	.3	.2	1.5	.0	.0	.0	.0	1.8	.3	1.0	2.8	.3	3.1	.0	90.7
TOT OBS:	614														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00003	.0	.6	.0	.0	.0	.0	.0	.6	.6	.0	1.8	.0	3.1	.0	93.9
06009	.0	.0	2.0	.0	.0	.0	.0	2.0	.0	3.4	.7	.0	1.3	.0	92.6
12015	.6	.0	3.7	.0	.0	.0	.0	3.7	.0	.6	5.5	.0	5.5	.0	84.7
18021	.6	.0	.0	.0	.0	.0	.0	.6	.6	.0	3.2	1.3	2.6	.0	91.6
TOT PCT	.3	.2	1.4	.0	.0	.0	.0	1.7	.3	1.0	2.9	.3	3.2	.0	90.6
TOT OBS:	629														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	1.5	3.1	.8	.1	.0	.0		5.5	6.7		3.6	.0	3.9	3.9	7.0	5.3	7.6	6.2
NE	.6	.9	.3	.0	.0	.0		1.8	6.1		1.7	.0	1.6	.5	2.8	5.3	2.2	1.0
E	.4	.3	.1	.0	.0	.0		.7	4.8		1.3	.0	.4	.3	1.1	.0	.8	.3
SE	.5	2.3	2.8	1.5	.1	.0		7.2	14.5		4.7	20.8	7.1	8.3	8.2	1.3	7.8	6.9
S	3.3	16.4	20.2	7.5	.8	.1		48.4	13.8		46.8	38.9	50.3	55.5	51.3	47.4	43.7	45.8
SW	2.7	8.5	8.5	1.7	.1	.0		21.6	11.1		27.5	30.6	22.8	17.9	16.3	25.0	20.3	24.6
W	1.4	2.3	.6	.1	.0	.0		4.3	6.6		5.9	4.2	3.1	3.3	2.8	5.3	5.2	5.0
NW	1.1	3.0	.6	.1	.0	.0		4.8	6.6		3.2	.0	2.8	2.3	4.8	5.3	8.4	6.0
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	5.8							5.8	.0		5.2	5.6	8.1	7.9	5.9	5.3	4.0	4.1
TOT OBS	467	995	915	300	27	4	2708		11.2		458	18	483	353	426	19	658	293
TOT PCT	17.2	36.7	33.8	11.1	1.0	.1		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	3.5	1.7	.3	.0	.0			5.5	6.7	3.5	3.9	6.9	7.2
NE	1.2	.6	.0	.0	.0			1.8	6.1	1.7	1.1	2.9	1.9
E	.6	.2	.0	.0	.0			.7	4.8	1.2	.3	1.1	.7
SE	1.5	2.8	2.1	.8	.0			7.2	14.5	5.4	7.6	7.9	7.5
S	10.2	20.5	14.8	2.5	.3			48.4	13.8	46.5	32.5	51.1	44.3
SW	6.9	9.6	4.7	.4	.0			21.6	11.1	27.6	20.8	16.7	21.6
W	2.7	1.3	.3	.0	.0			4.3	6.6	5.9	3.2	2.9	5.2
NW	3.1	1.5	.2	.0	.0			4.8	6.6	3.0	2.6	4.8	7.7
VAR	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0
CALM	5.8							5.8	.0	5.3	8.0	5.8	4.0
TOT OBS	958	1036	804	101	9	2708			11.2	476	836	445	951
TOT PCT	35.4	38.3	22.3	3.7	.3			100.0		100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	5.3	11.1	38.2	30.5	13.2	1.5	.2	11.6	100.0	476
0600Z	8.0	10.2	38.5	32.3	10.2	.8	.0	10.7	100.0	836
1200Z	5.8	13.5	36.9	34.8	8.3	.7	.0	10.4	100.0	445
1800Z	4.0	11.9	34.4	36.3	12.1	1.1	.3	11.9	100.0	951
TOT	156	311	995	915	300	27	.4	11.2		2708
PCT	5.8	11.5	36.7	33.8	11.1	1.0	.1		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 8 OBS	TOTAL OBS	MEAN CLOUD COVER
N	.3	1.0	.6	1.3		5.7
NE	.0	.0	.8	1.2		7.2
E	.0	.0	.3	.3		6.5
SE	2.2	1.0	.6	.1		2.6
S	30.3	6.8	5.1	6.8		2.6
SW	17.9	3.5	3.8	3.5		2.5
W	2.6	.3	.3	.8		2.5
NW	1.2	.5	.3	.9		4.4
VAR	.0	.0	.0	.0		4.0
CALM	1.5	1.5	1.0	1.8		4.6
TOT OBS	219	57	50	65	391	2.9
TOT PCT	56.0	14.6	12.8	16.6	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	2500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999			
N	.3	.0	.0	.4	.9	.2	.0	.0	.0	.0	1.5	
NE	.3	.0	.0	.3	.6	.3	.0	.0	.0	.0	.1	
E	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.3	
SE	.0	.0	.1	.0	.0	.5	.0	.0	.0	.0	3.1	
S	.3	.0	.9	3.8	2.8	2.4	.5	.0	.0	.3	38.1	
SW	.3	.3	.5	1.3	2.9	.4	.5	.3	.0	.0	22.2	
W	.0	.0	.0	.4	.6	.0	.0	.0	.0	.0	2.9	
NW	.0	.0	.0	.3	.4	.0	.3	.0	.0	.0	2.0	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.3	.5	.8	1.0	.0	.0	.0	.0	3.3	
TOT OBS	4	2	8	28	35	19	6	1	0	1	287	391
TOT PCT	1.0	.5	2.0	7.2	9.0	4.9	1.5	.3	.0	.3	73.4	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >30YD	= OR >0
= OR >6500	.3	.3	.3	.3	.3	.3	.3	.3
= OR >5000	.5	.5	.5	.5	.5	.5	.5	.5
= OR >3500	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0
= OR >2000	4.5	6.8	6.8	6.8	6.8	6.8	6.8	6.8
= OR >1000	11.6	15.4	15.6	15.9	15.9	15.9	15.9	15.9
= OR >600	15.9	21.4	22.7	22.9	22.9	22.9	22.9	22.9
= OR >300	16.1	22.9	24.7	25.2	25.2	25.2	25.2	25.2
= OR >150	16.1	23.2	24.9	25.4	25.4	25.4	25.4	25.4
= OR >0	16.9	23.9	25.7	26.2	26.2	26.2	26.4	26.4
TOTAL	67	95	102	104	104	104	105	105

TOTAL NUMBER OF OBS: 397

PCT FREQ NH <5/8: 73.6

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8 OBS	TOTAL OBS
31.3	16.9	11.3	8.0	4.9	2.8	3.8	6.1	14.4	425

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.2	.0	.0	.3	.*	.0	.0	.0	.0	.0	.5
	TOT %	.0	.2	.0	.0	.3	.*	.0	.0	.0	.0	.0	.5
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.3
	TOT %	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.3
1<2	PCP	.0	.2	.0	.*	.1	.0	.0	.0	.0	.0	.0	.3
	NO PCP	.6	.0	.0	.0	.0	.2	.0	.2	.0	.3	1.3	
	TOT %	.6	.2	.0	.*	.1	.2	.0	.2	.0	.3	1.6	
2<5	PCP	.0	.2	.0	.0	.3	.0	.0	.0	.0	.0	.0	.5
	NO PCP	.2	.2	.2	.3	.1	.7	.1	.0	.0	.2	1.8	
	TOT %	.2	.3	.2	.3	.4	.7	.1	.0	.0	.2	2.3	
5<10	PCP	.0	.0	.0	.0	.0	.3	.2	.0	.0	.0	.0	.5
	NO PCP	1.1	.6	.7	1.6	8.5	3.7	.8	.6	.0	1.8	19.3	
	TOT %	1.1	.6	.7	1.6	8.5	4.0	1.0	.6	.0	1.8	19.8	
10+	PCP	.1	.*	.0	.0	.2	.0	.0	.2	.0	.0	.0	.5
	NO PCP	2.4	2.1	.5	2.0	35.2	21.5	3.6	4.0	.0	3.8	74.9	
	TOT %	2.5	2.1	.5	2.0	35.3	21.5	3.6	4.1	.0	3.8	75.4	
TOT OBS													610
TOT PCT		4.4	3.4	1.3	3.9	45.0	26.4	4.6	5.0	.0	6.1	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.1	.0	.0	.1	.1	.0	.0	.0	.4	.6	
	4-10	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.4	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.1	.0	.0	.5	.2	.0	.0	.0	.4	1.3	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	
	11-21	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.3	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.3	.1	.0	.0	.0	.0	.4	
1<2	0-3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.4	.6	
	4-10	.3	.1	.0	.*	.1	.1	.0	.2	.0	.0	.9	
	11-21	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.7	.1	.0	.*	.1	.1	.0	.2	.0	.4	1.7	
2<5	0-3	.2	.0	.0	.0	.0	.1	.0	.1	.0	.3	.6	
	4-10	.5	.1	.1	.2	.3	.2	.0	.0	.0	.0	1.4	
	11-21	.0	.1	.0	.1	.3	.4	.1	.0	.0	.0	1.0	
	22+	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	
	TOT %	.7	.3	.1	.3	.6	.8	.1	.1	.0	.3	3.2	
5<10	0-3	.5	.2	.3	.1	.7	.5	.8	.3	.0	1.8	5.2	
	4-10	.8	.2	.3	.3	2.5	1.6	.2	.3	.0	.0	6.2	
	11-21	.1	.1	.0	.5	2.3	2.2	.0	.0	.0	.0	5.3	
	22+	.0	.0	.0	.2	2.7	.4	.0	.0	.0	.0	3.4	
	TOT %	1.4	.5	.5	1.2	8.2	4.7	1.0	.6	.0	1.8	20.1	
10+	0-3	.8	.4	.1	.4	1.9	2.1	.7	1.0	.0	3.9	11.4	
	4-10	1.6	1.1	.2	1.2	10.8	8.6	2.1	1.9	.0	.0	27.6	
	11-21	.1	.3	.0	.3	16.0	9.7	.2	.4	.0	.0	27.0	
	22+	.1	.0	.0	.1	5.4	1.6	.1	.0	.0	.0	7.4	
	TOT %	2.7	1.7	.4	2.0	34.1	22.0	3.1	3.3	.0	3.9	73.4	
TOT OBS													773
TOT PCT		5.6	2.8	1.0	3.6	43.9	27.9	4.2	4.2	.0	6.7	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY MGT	TOTAL OBS
00003	.0	.0	.9	4.5	4.5	3.6	.9	.0	.0	.0	14.5	85.5	110
06009	1.9	.0	2.8	6.6	7.5	3.8	.0	.9	.0	.0	23.6	76.4	106
12015	1.9	1.9	3.7	11.2	15.0	6.5	2.8	.0	.0	.0	43.0	57.0	107
18021	.0	.0	1.1	4.4	7.7	4.4	2.2	.0	.0	1.1	20.9	79.1	91
TOT	4	2	9	28	36	19	6	1	0	1	106	308	414
PCT	1.0	.5	2.2	6.8	8.7	4.6	1.4	.2	.0	.2	25.6	74.4	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.5	.0	1.1	2.7	20.0	75.7	185
06009	1.4	1.4	.9	1.4	19.1	75.8	215
12015	2.6	.0	3.1	5.2	19.2	69.9	193
18021	.5	.5	2.1	4.1	21.0	71.8	195
TOT	10	4	14	26	156	578	788
PCT	1.3	.5	1.8	3.3	19.8	73.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.0	1.0	5.7	9.5	84.8	105
06009	1.9	4.8	11.5	12.5	76.0	104
12015	2.0	6.9	19.6	24.5	55.9	102
18021	.0	1.2	9.3	15.1	75.6	86
TOT	4	14	46	61	290	397
PCT	1.0	3.5	11.6	15.4	73.0	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
75/79	.0	.0	.4	.2	.0	.2	.0	.0	4	.7
70/74	.0	.0	1.1	.0	.9	1.1	.6	1.5	28	5.2
65/69	.0	.0	.2	1.1	2.8	7.1	6.2	7.6	134	25.0
60/64	.0	.0	.0	.4	2.1	12.7	20.9	12.5	260	48.5
55/59	.0	.0	.0	.0	.6	2.1	9.9	7.1	105	19.6
50/54	.0	.0	.0	.0	.0	.0	.0	.9	5	.9
TOTAL	0	0	9	9	34	124	201	159	536	100.0
PCT	.0	.0	1.7	1.7	6.3	23.1	37.5	29.7		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
75/79	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0
70/74	.2	.6	.0	.4	1.3	1.9	.5	.4	.0	.0
65/69	1.7	1.2	.9	2.1	10.3	5.8	1.1	1.1	.0	.9
60/64	2.2	1.9	.3	1.3	23.1	10.8	2.5	3.5	.0	3.0
55/59	1.1	.8	.2	1.3	8.3	5.3	.1	.0	.0	2.4
50/54	.4	.0	.0	.0	.0	.0	.0	.0	.0	.6
TOTAL	5.6	4.4	1.4	5.0	43.0	24.5	4.2	4.9	.0	6.9

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	75	72	68	62	56	54	50	62.0	405
06009	70	67	64	59	55	53	52	59.3	847
12015	78	69	66	61	55	54	53	60.8	428
18021	79	74	71	64	58	55	50	64.2	829
TOT	79	73	69	61	55	54	50	61.6	2569

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	4.3	5.7	19.3	38.6	32.1	83	140		
06009	.0	.0	4.0	20.6	39.7	35.7	86	126		
12015	.0	.7	5.7	20.7	40.7	32.1	85	140		
18021	.0	7.6	9.0	31.7	31.0	20.7	79	145		
TOT	0	18	34	128	206	165	83	551		

PERIOD: (PRIMARY) 1909-1978
(OVER-ALL) 1861-1978

JANUARY

AREA 0028 VALPARAISO
34.5S 72.9W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	77 80	TOT	W FOG	NO FOG
20/22	.0	.0	.0	.0	.0	.0	.2	1	.0	.2
17/19	.0	.0	.2	.0	.0	.6	.0	4	.0	.8
14/16	.0	.0	.0	.2	.0	.0	.0	1	.0	.2
11/13	.0	.0	.0	.6	.6	.4	.0	8	.0	1.6
9/10	.0	.0	.2	.8	.6	.2	.0	9	.0	1.8
7/8	.0	.2	2.0	.8	1.4	.0	.0	22	.4	4.1
6	.0	.4	2.0	1.4	.2	.0	.0	20	.2	3.9
5	.0	1.6	3.1	1.0	.0	.0	.0	28	.2	5.5
4	.0	2.3	3.5	1.2	.2	.0	.0	36	.8	6.5
3	.0	1.4	3.1	2.0	.0	.0	.0	32	.2	6.3
2	.0	2.2	4.3	2.9	.0	.0	.0	46	.4	9.0
1	1.4	3.1	5.3	2.0	.0	.2	.0	59	.2	11.9
0	.6	4.5	6.5	3.7	.0	.0	.0	75	.2	15.1
-1	1.2	3.7	6.3	2.2	.0	.0	.0	66	.4	13.1
-2	1.2	3.7	2.5	.8	.2	.0	.0	41	.0	8.4
-3	.4	2.0	1.8	.2	.0	.0	.0	22	.0	4.5
-4	.0	1.0	.4	.2	.0	.0	.0	8	.0	1.6
-5	.6	.6	.6	.0	.0	.0	.0	9	.0	1.8
-6	.0	.2	.2	.0	.0	.0	.0	2	.0	.4
TOTAL	27	133	206	99	16	7	1	489	15	474
PCT	5.5	27.2	42.1	20.2	3.3	1.4	.2	100.0	3.1	96.9

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.4	.0	.0	.0	.0	.4	.5	.6	.0	.0	.0	.0	1.1
1-2	.5	.5	.0	.0	.0	.0	.9	.0	.0	.5	.0	.0	.0	.5
3-4	.5	.5	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.9
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.9	1.3	.0	.0	.0	.0	2.2	.5	.6	1.4	.0	.0	.0	2.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.5	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.5	.2	.0	.0	.0	.7
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	.0	1.3
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.1	.0	.0	.4
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.6
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.5	.0	.0	.0	.0	.5	.0	.7	1.5	1.3	.0	.0	3.5

PERIOD: (OVER-ALL) 1963-1978

JANUARY

AREA 0028 VALPARAISO
34.55 72.9W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	1.3	.0	.0	.0	.0	1.3	.5	2.0	.0	.0	.0	.0	2.5
1-2	.5	4.8	3.7	.0	.0	.0	9.0	.0	4.2	2.6	.0	.0	.0	6.8
3-4	.0	3.3	8.4	1.3	.0	.0	13.0	.0	1.5	5.3	.6	.0	.0	7.4
5-6	.5	.7	5.5	2.6	.0	.0	9.2	.0	.5	2.5	1.5	.0	.0	4.4
7	.0	.0	2.8	5.6	.0	.0	8.4	.0	.0	2.3	1.3	.0	.0	3.6
8-9	.0	.5	1.4	6.8	.8	.0	9.5	.0	.0	.0	.6	.1	.0	.7
10-11	.0	.0	1.1	2.2	.4	.0	3.6	.0	.0	.4	.1	.1	.0	.6
12	.0	.0	.5	.8	.0	.0	1.3	.0	.0	.0	.1	.0	.0	.1
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.9	10.5	23.4	19.3	1.2	.0	55.3	.5	8.2	13.0	4.2	.2	.0	26.1

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.5	.8	.0	.0	.0	.0	1.3	.5	.6	.5	.0	.0	.0	1.5	
1-2	.0	.4	.4	.0	.0	.0	.7	.0	.5	.1	.0	.0	.0	.6	
3-4	.4	.4	.0	.0	.0	.0	.7	.1	.0	.0	.0	.0	.0	.1	
5-6	.0	.4	.0	.0	.0	.0	.4	.0	.1	.5	.0	.0	.0	.6	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.8	1.9	.4	.0	.0	.0	3.0	.6	1.2	1.1	.0	.0	.0	2.8	95.8

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	6.1	6.1	.5	.0	.0	.0	12.6	
1-2	.9	10.7	7.5	.0	.0	.0	19.2	
3-4	.9	5.6	15.0	1.9	.0	.0	23.4	
5-6	.5	1.9	8.4	4.2	.0	.0	15.0	
7	.0	.0	5.1	7.0	.0	.0	12.1	
8-9	.0	.5	2.3	7.9	.9	.0	11.7	
10-11	.0	.0	1.4	2.8	.5	.0	4.7	
12	.0	.0	.5	.9	.0	.0	1.4	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	8.4	24.8	40.7	24.8	1.4	.0	100.0	214

PERIOD: (OVER-ALL) 1949-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.3	5.2	7.3	6.1	3.5	5.0	1.2	.6	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	109	5
6-7	.0	.0	4.4	10.5	9.0	2.3	1.7	.9	.9	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	103	6
8-9	.3	1.5	2.3	3.5	2.9	2.0	2.9	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	55	6
10-11	.0	.6	1.5	2.3	.3	1.2	.3	.0	.3	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	25	7
12-13	.0	.0	.9	1.2	.3	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	5
>13	.0	.0	.0	.3	.0	.9	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8	8
INDET	3.2	2.0	.6	1.2	1.2	.9	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	34	4
TOTAL	20	32	58	86	59	45	26	6	7	4	0	0	0	0	0	0	0	0	0	343	6
PCT	5.8	9.3	16.9	25.1	17.2	13.1	7.6	1.7	2.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1865-1978

FEBRUARY

AREA 0028 VALPARAISO
34.45 72.7W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA						
WIND DIR	RAIN	RAIN CHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SNOW	NO SIG WEA	
N	.0	.0	5.3	.0	.0	.0	.0	5.3	.0	.0	15.8	.0	.0	.0	78.9	
NE	.0	.0	.0	.0	.0	.0	.0	.0	7.4	.0	3.7	.0	.0	.0	88.9	
E	.0	.0	22.6	.0	.0	.0	.0	22.6	.0	.0	.0	.0	.0	.0	77.4	
SE	.0	.0	2.3	.0	.0	.0	.0	2.3	.0	.0	.0	.0	.0	.0	97.7	
S	.0	.0	1.0	.0	.0	.0	.0	1.0	.0	.0	2.5	.0	2.7	.0	93.8	
SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.2	1.0	3.2	.0	89.6	
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	19.4	.0	8.3	.0	72.2	
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13.0	.0	.0	.0	87.0	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	18.2	.0	9.1	.0	72.7	
TOT PCT	.0	.0	1.2	.0	.0	.0	.0	1.2	.2	.0	6.0	.2	3.0	.0	89.3	
TOT OBS:	402															

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN CHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SNOW	NO SIG WEA
00&03	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.7	1.0	2.9	.0	87.4
06&09	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	3.7	.0	3.7	.0	91.6
12&15	.0	.0	2.1	.0	.0	.0	.0	2.1	.0	.0	10.4	.0	2.1	.0	85.4
18&21	.0	.0	2.9	.0	.0	.0	.0	2.9	.0	.0	2.9	.0	2.9	.0	91.4
TOT PCT	.0	.0	1.2	.0	.0	.0	.0	1.2	.2	.0	6.3	.2	2.9	.0	89.1
TOT OBS:	411														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	1.7	3.2	1.1	.1	*	.0	6.1	7.1	5.9	6.7	5.0	5.8	4.9	14.3	7.2	7.0		
NE	.7	1.2	.3	*	.1	.0	2.2	6.6	1.4	.0	2.3	2.6	2.3	4.8	2.7	1.6		
E	.7	.3	.1	.0	*	.0	1.1	5.2	1.0	.0	1.0	1.2	1.6	.0	1.3	.3		
SE	.7	1.8	2.0	.7	.1	*	5.2	12.9	4.7	.0	2.9	6.0	7.1	3.6	6.6	3.4		
S	3.1	16.3	20.9	5.7	1.1	.1	43.0	13.6	36.7	52.6	53.9	51.0	25.0	42.3	42.5	42.5		
SW	2.6	9.4	8.4	1.4	.2	.0	22.1	11.0	25.3	51.7	20.9	17.6	17.0	47.6	23.9	25.2		
W	1.1	2.1	.6	.1	.0	.0	3.9	6.9	4.4	5.0	2.9	2.5	2.1	.0	5.8	5.5		
NW	1.3	2.3	.6	*	.1	.0	4.3	7.0	5.0	.0	2.5	3.0	3.8	4.8	5.6	7.1		
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
CALM	7.8						7.8	.0	9.2	.0	9.8	7.4	10.3	.0	4.6	7.5		
TOT OBS	477	880	814	195	40	3	2409		10.7	392	15	438	363	379	21	560	241	
TOT PCT	19.8	36.5	33.8	8.1	1.7	.1		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	00 03					06 09	12 15	18 21		
N	3.4	2.3	.3	.0	*		6.1	7.1	6.0	5.4	5.4	7.1		
NE	1.6	.5	.1	.0	.1		2.2	6.6	1.4	2.5	2.4	2.3		
E	.9	.2	.0	*	.0		1.1	5.2	1.0	1.1	1.5	1.0		
SE	1.7	1.6	1.6	.2	.1		5.2	12.9	4.5	4.3	6.9	5.6		
S	10.0	21.2	12.8	2.8	.4		47.2	13.6	42.8	53.2	49.6	42.4		
SW	6.7	10.6	4.1	.6	*		22.1	11.0	26.3	19.4	18.6	24.3		
W	2.5	1.1	.2	*	.0		3.9	6.9	4.4	2.7	2.0	5.7		
NW	2.5	1.5	.2	.1	.0		4.3	7.0	4.8	2.7	3.9	6.0		
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		
CALM	7.8						7.8	.0	8.8	8.7	9.8	5.5		
TOT OBS	896	999	468	92	14	2409		10.7	407	801	400	801		
TOT PCT	37.2	39.0	19.4	3.8	.6		100.0		100.0	100.0	100.0	100.0		

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1865-1978

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

MOON	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT	TOTAL
				11-21	22-33	34-47				FREQ	OBS
0000	8.8	11.5	35.1	34.2	8.4	1.7	.2	10.9	100.0		407
0600	8.7	12.5	37.8	32.6	6.7	1.6	.0	10.2	100.0		801
1200	9.8	12.3	35.3	33.8	7.0	1.8	.0	10.2	100.0		400
1800	5.5	11.5	30.5	34.8	9.9	1.6	.2	11.4	100.0		801
TOT	189	288	880	814	195	40	3	10.7			2409
PCT	7.8	12.0	36.5	33.8	8.1	1.7	.1	100.0			

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	1.3	.2	.7	1.1		4.3
NE	.3	.4	.3	1.2		5.8
E	.3	.2	.0	.7		5.0
SE	1.3	.1	.5	.9		3.5
S	34.3	4.4	6.1	7.5		2.4
SW	16.9	2.4	2.4	3.6		2.3
W	.2	.3	1.4	3.1		7.0
NW	.3	1.0	1.0	.9		5.0
VAR	.0	.0	.0	.0		.0
CALM	.7	.0	2.0	2.6		6.3
TOT OBS	171	28	44	64	307	3.1
TOT PCT	55.7	9.1	14.3	20.8	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999			
N	.5	.0	.0	.3	.9	.0	.0	.0	.0	.0	1.5	
NE	.5	.0	.3	.0	.7	.0	.0	.0	.0	.0	.7	
E	.0	.0	.3	.0	.3	.0	.0	.0	.0	.0	.6	
SE	.0	.0	.0	.5	.0	.2	.0	.0	.0	.0	1.5	
S	.8	.0	.7	2.9	4.1	1.6	.3	.0	.2	1.0	40.7	
SW	.8	.0	.0	1.0	2.3	.7	.1	.3	.1	.3	19.9	
W	.3	.0	.0	1.1	2.4	.2	.2	.0	.0	.0	.8	
NW	.3	.0	.0	.1	.7	.3	.0	.0	.0	.0	1.6	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.7	.0	.0	.7	2.3	.3	.3	.0	.0	.0	1.0	
TOT OBS	12	0	4	20	42	10	3	1	1	4	210	307
TOT PCT	3.9	.0	1.3	6.5	13.7	3.3	1.0	.3	.3	1.3	68.4	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

	CEILING (FEET)	= OR >10	= OR >5	= OR >2	VSBY (NM)				= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	1.6	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
= OR >5000	1.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
= OR >3500	2.2	2.9	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
= OR >2000	2.8	5.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
= OR >1000	14.4	18.2	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
= OR >600	17.9	24.3	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
= OR >300	18.5	25.6	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
= OR >150	18.5	25.6	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
= OR >0	19.2	26.5	30.0	30.0	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4
TOTAL		60	83	94	94	95	95	95	95	95	100	101	101

TOTAL NUMBER OF OBS: 313

PCT FREQ NH <5/8: 67.7

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	DBSD	TOTAL OBS
	38.0	14.1	7.1	4.6	4.0	3.7	2.8	5.5	16.9	3.4	326

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.2	.0	.0	.0	.4	.1	.2	.3	.0	.7	2.0	
	TOT %	.2	.0	.0	.0	.4	.1	.2	.3	.0	.7	2.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.5	
	TOT %	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.5	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
2<5	PCP	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	
	NO PCP	.4	.1	.0	.0	1.2	.7	.4	.1	.0	.5	3.5	
	TOT %	.6	.1	.0	.0	1.2	.7	.4	.1	.0	.5	3.7	
5<10	PCP	.0	.0	.2	.0	.2	.0	.0	.0	.0	.0	.5	
	NO PCP	1.8	.6	.0	.2	6.7	3.4	1.2	1.2	.0	1.5	16.7	
	TOT %	1.8	.6	.2	.2	7.0	3.4	1.2	1.2	.0	1.5	17.2	
10+	PCP	.0	.0	.2	.1	.2	.0	.0	.0	.0	.0	.5	
	NO PCP	2.1	2.7	1.5	2.4	40.0	20.2	2.6	1.8	.0	2.7	76.1	
	TOT %	2.1	2.7	1.7	2.4	40.3	20.2	2.6	1.8	.0	2.7	76.6	
TOT OBS													401
TOT PCT		4.7	3.4	1.9	2.7	49.1	24.8	4.5	3.4	.0	5.5	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.2	.0	.0	.3	.0	.0	.0	.0	1.0	1.5	
	4-10	.0	.2	.0	.2	.5	.0	.3	.0	.0		1.6	
	11-21	.0	.0	.0	.0	.2	*	.1	.0	.0		.3	
	22+	.1	.0	.0	.0	.0	.0	*	.0	.0		.2	
	TOT %	.1	.3	.0	.2	.9	.6	.1	.4	.0	1.0	3.6	
1/2<1	0-3	.0	.0	.0	.0	.0	.2	.0	.0	.0	.3	.5	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	
	11-21	.0	.0	.0	.0	.1	*	.0	.0	.0		.2	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	
	TOT %	.0	.0	.0	.0	.1	.2	.0	.0	.0	.3	.7	
1<2	0-3	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	
	4-10	.0	.0	.0	.0	.2	.0	.0	.0	.0		.2	
	11-21	.0	.0	.0	.0	.2	.0	.0	.0	.0		.2	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	
	TOT %	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.5	
2<5	0-3	.2	.1	.0	.0	.4	.7	.2	.2	.0	.8	2.6	
	4-10	.4	.1	.0	.0	.5	.8	.1	*	.0		2.0	
	11-21	.0	.0	.0	.0	.5	.2	.0	.0	.0		.7	
	22+	.0	.0	.0	.0	.2	.0	.0	.0	.0		.2	
	TOT %	.7	.2	.0	.0	1.6	1.7	.3	.2	.0	.8	5.4	
5<10	0-3	.9	.2	.0	.1	.9	.9	.3	.4	.0	2.9	6.5	
	4-10	.9	*	.0	.1	2.3	1.5	.6	.6	.0		5.9	
	11-21	.2	.0	.0	.0	3.0	1.9	.0	.0	.0		5.1	
	22+	.0	.2	.0	.0	.4	.1	.2	.0	.0		1.0	
	TOT %	1.9	.4	.2	.2	6.5	4.3	1.1	1.0	.0	2.9	18.5	
10+	0-3	.3	1.1	.5	.6	.9	1.5	.3	.2	.0	4.1	9.5	
	4-10	.8	.7	.4	1.0	9.5	6.8	1.8	.5	.0		21.4	
	11-21	.3	.0	.2	.2	22.1	10.6	.3	.3	.0		34.0	
	22+	.0	.0	.0	.0	4.5	1.6	.1	.2	.0		6.4	
	TOT %	1.4	1.8	1.1	1.8	37.1	20.5	2.5	1.2	.0	4.1	71.4	
TOT OBS													611
TOT PCT		4.1	2.6	1.3	2.1	46.7	27.3	4.0	2.8	.0	9.2	100.0	

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1869-1978

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HR	000	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NM <5/8 ANY MGT	TOTAL OBS
(GMT)	149	299	599	999	1999	3499	4999	6499	7999				
00003	5.1	.0	2.5	3.8	13.9	2.5	.0	.0	.0	3.8	31.6	68.4	79
06009	1.1	.0	1.1	2.3	10.2	3.4	2.3	1.1	.0	1.1	22.7	77.3	88
12015	5.5	.0	.0	11.0	21.9	1.4	.0	.0	.0	1.4	41.1	58.9	73
18021	3.7	.0	1.2	11.0	8.5	4.9	1.2	.0	1.2	.0	31.7	68.3	82
TOT	12	0	4	22	43	10	3	1	1	5	101	221	322
PCT	3.7	.0	1.2	6.8	13.4	3.1	.9	.3	.3	1.6	31.4	68.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL
(GMT)							OBS
00003	2.8	1.4	.0	4.2	18.2	73.4	143
06009	2.5	.5	.5	7.0	18.0	71.5	200
12015	8.5	.8	.8	4.7	21.7	63.6	129
18021	1.4	.0	.7	4.7	16.9	76.4	148
TOT	22	4	3	33	115	443	620
PCT	3.5	.6	.5	5.3	18.5	71.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HR	<150	<600	<1000	1000+	NM <5/8	TOTAL
(GMT)	<50YD	<1	<5	AND 5+	AND 5+	OBS
00003	5.3	9.3	17.3	20.0	62.7	75
06009	1.1	2.3	6.9	16.1	77.0	87
12015	5.6	8.3	19.4	22.2	58.3	72
18021	3.8	5.1	17.7	15.2	67.1	79
TOT	12	19	47	57	209	313
PCT	3.8	6.1	15.0	18.2	66.8	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL	PCT
									OBS	FREQ
75/79	.0	.0	.0	.3	.3	.0	.0	.0	2	.5
70/74	.0	.0	.0	.0	.3	1.1	.3	1.4	11	3.0
65/69	.0	.0	.3	.5	2.7	4.3	5.4	3.5	62	16.8
60/64	.0	.0	.0	.5	5.2	11.7	25.8	7.6	187	50.8
55/59	.0	.0	.0	.0	1.4	5.4	12.0	8.7	101	27.4
50/54	.0	.0	.0	.0	.0	.3	.8	.3	5	1.4
TOTAL	0	0	1	5	36	84	163	79	368	100.0
PCT	.0	.0	.3	1.4	9.8	22.8	44.3	21.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
75/79	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0
70/74	.5	.3	.4	.3	.2	.9	.0	.3	.0	.0
65/69	1.5	.5	.7	.7	7.3	3.3	.7	1.0	.0	1.1
60/64	2.9	2.4	.8	1.1	25.3	13.9	1.3	1.0	.0	2.2
55/59	.5	.3	.0	.5	15.8	6.8	1.8	.4	.0	1.4
50/54	.0	.0	.0	.0	.6	.5	.3	.0	.0	.0
TOTAL	5.4	3.7	1.9	2.6	49.2	26.0	4.1	2.6	.0	4.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL
(GMT)									OBS
00003	77	69	68	61	56	53	52	61.6	406
06009	70	67	65	59	55	52	50	59.6	802
12015	75	70	67	61	56	53	53	61.0	379
18021	78	75	71	64	58	55	53	64.0	673
TOT	78	72	68	61	55	53	50	61.5	2260

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL
(GMT)										OBS
00003	.0	1.0	12.2	18.4	51.0	17.3	82	98		
06009	.0	.0	5.5	22.0	44.0	28.6	84	91		
12015	.0	1.0	6.9	24.8	42.6	24.8	83	101		
18021	.0	4.1	12.2	25.5	40.8	17.3	80	98		
TOT	0	6	36	88	173	85	82	388		

PERIOD: (PRIMARY) 1908-1978
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	TOT	W FOG	NO FOG
9/10	.0	.0	.9	.9	.0	.3	7	.0	2.0
7/8	.0	.3	.5	.6	.6	.0	7	.0	2.0
6	.0	.3	2.0	.9	.3	.0	12	.3	3.1
5	.0	.9	3.1	1.7	.3	.0	21	.3	5.7
4	.3	1.1	3.4	.0	.0	.0	17	.6	4.3
3	.0	2.6	2.3	1.4	.0	.0	22	.6	5.7
2	.3	4.3	5.7	1.4	.3	.0	42	1.1	10.9
1	.9	6.3	3.7	1.7	.0	.0	44	.0	12.6
0	.9	3.1	6.0	2.9	.3	.0	46	1.1	12.0
-1	.3	3.1	7.7	.6	.0	.0	41	1.4	10.3
-2	2.0	2.3	4.3	.6	.0	.0	32	.3	8.9
-3	.9	4.9	1.7	.0	.0	.0	26	1.1	6.3
-4	.9	2.3	1.4	.3	.0	.0	17	.0	4.9
-5	.3	2.6	.6	.3	.0	.0	13	.0	3.7
-6	.0	.0	.3	.3	.0	.0	2	.0	.6
-7/-8	.0	.0	.0	.3	.0	.0	1	.0	.3
TOTAL	23	119	153	48	1	350	24	326	
PCT	6.6	34.0	43.7	13.7	1.7	.3	100.0	6.9	93.1

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.6	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
1-2	.0	1.2	.6	.0	.0	.0	1.8	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.5	.0	.0	.0	.0	.5	.0	.2	.0	.0	.0	.0	.2
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.7	1.2	.0	.0	.0	2.9	.0	.2	.0	.0	.0	.0	.2

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.2	.0	.0	.0	1.4
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.2	.0	.0	.0	1.4

PERIOD: (OVER-ALL) 1963-1978

FEBRUARY

AREA 0028 VALPARAISO
34.45 72.7W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	1.1	.0	.0	.0	.0	1.1	.6	.3	.0	.0	.0	.0	1.5
1-2	.0	6.0	5.8	.0	.0	.0	11.8	1.2	5.7	2.6	.0	.0	.0	9.5
3-4	.0	3.7	12.1	.5	.0	.0	16.3	.0	1.2	7.1	.2	.0	.0	8.4
5-6	.0	.9	4.4	1.2	.0	.0	6.6	.0	2.1	2.9	1.8	.0	.0	6.9
7	.0	.5	2.9	2.3	.6	.0	6.3	.0	.2	1.4	.2	.6	.0	2.3
8-9	.0	.0	.0	.5	.0	.0	1.5	.0	.0	.0	.2	.0	.0	.2
10-11	.0	.0	.0	1.2	.0	.0	1.8	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	1.1	1.1	.0	2.1	.0	.6	.0	.2	.2	.0	.9
13-16	.0	.0	.0	2.0	.5	.0	2.5	.0	.0	.0	.5	.2	.0	.6
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.6
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	12.1	25.9	8.7	2.1	.0	46.9	1.8	10.7	14.6	2.9	.9	.0	31.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	1.1	.0	.0	.0	.0	1.7	.0	.6	.0	.0	.0	.0	.6	
1-2	.0	3.7	.0	.0	.0	.0	3.7	.0	1.8	1.2	.0	.0	.0	3.1	
3-4	.0	.5	.5	.0	.0	.0	1.5	.0	1.4	.0	.0	.0	.0	1.4	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	1.2	5.2	.5	.0	.0	.0	6.9	.0	3.8	1.2	.0	.0	.0	5.1	96.3

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	5.4	3.0	1.2	.0	.0	.0	9.5	
1-2	2.4	19.6	10.1	.0	.0	.0	32.1	
3-4	.6	7.7	19.0	.6	.0	.0	28.0	
5-6	.0	3.0	7.1	3.0	.0	.0	13.1	
7	.0	.6	4.2	2.4	1.2	.0	8.3	
8-9	.0	.0	.0	.6	.0	.0	.6	
10-11	.0	.0	.6	1.2	.0	.0	1.8	
12	.0	.6	.0	1.2	1.2	.0	3.0	
13-16	.0	.0	.0	2.4	.6	.0	3.0	
17-19	.0	.0	.0	.0	.0	.0	.6	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	8.3	35.1	42.3	11.3	3.0	.0	100.0	168

PERIOD: (OVER-ALL) 1950-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.2	6.6	5.4	5.8	3.1	2.7	2.3	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	72
6-7	.0	1.6	2.3	6.2	5.4	2.7	1.9	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	56
8-9	.4	1.2	2.3	2.3	4.3	1.2	.4	.4	1.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	37
10-11	.0	.8	1.9	3.5	1.6	2.7	2.5	1.6	.8	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	43
12-13	.0	.0	.0	.4	.4	.8	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11
>13	.0	.0	.0	.4	.0	.4	1.9	.0	1.2	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11
INDET	1.2	.8	.4	.8	2.3	1.6	1.9	.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	27
TOTAL	7	28	35	50	44	31	35	11	14	2	0	0	0	0	0	0	0	0	0	0	257
PCT	2.7	10.9	13.6	19.5	17.1	12.1	13.6	4.3	5.4	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1805-1978

MARCH

AREA 0028 VALPARAISO
34.05 73.0W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	.0	.0	2.9	.0	.0	.0	.0	2.9	.0	.0	15.2	.0	3.8	.0	78.1
NE	.0	.0	2.4	.0	.0	.0	.0	2.4	9.8	.0	19.5	.0	.0	.0	68.3
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	22.2	.0	.0	.0	77.8
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.7	11.6	.0	.0	.0	83.7
S	.0	.2	.4	.0	.0	.0	.0	.7	.0	.2	4.2	.0	.0	.0	88.9
SW	.0	.5	.9	.0	.0	.0	.0	1.4	.9	.0	6.0	.0	5.1	.0	86.6
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	15.1	.0	.0	.0	84.9
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.6	.0	.0	.0	91.4
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	10.0	.0	.0	.0	.0	10.0	.0	.0	26.7	3.3	16.7	.0	43.3
TOT PCT	.0	.2	1.3	.0	.0	.0	.0	1.5	.4	.2	8.1	.2	5.5	.0	84.0
TOT OBS:	457														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00603	.0	.0	1.8	.0	.0	.0	.0	1.8	.8	.8	5.4	.0	3.6	.0	89.3
06009	.0	.8	2.4	.0	.0	.0	.0	3.3	.8	.8	7.3	.0	1.6	.0	86.2
12015	.0	.0	.8	.0	.0	.0	.0	.8	.8	.0	9.9	.8	6.6	.0	81.0
18021	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.8	.0	9.6	.0	81.6
TOT PCT	.0	.2	1.3	.0	.0	.0	.0	1.5	.4	.2	7.9	.2	5.3	.0	84.5
TOT OBS:	470														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	2.3	4.1	1.4	.5	.0	.0		8.3	7.7	6.9	10.7	7.7	7.3	7.7	10.3	9.6	10.0	
NE	1.0	1.5	.3	.0	.0	.0		2.8	5.8	2.1	.0	2.2	2.9	2.9	1.5	3.1	3.9	
E	.8	.7	.0	.0	.0	.0		1.5	4.5	1.2	.0	.7	3.1	2.1	.0	1.5	.6	
SE	1.0	3.4	2.6	.7	.2	.0		7.9	11.5	5.8	3.6	8.7	12.3	8.1	11.8	7.4	4.7	
S	4.3	19.0	18.4	5.7	.6	.0		46.0	11.7	43.9	62.5	46.5	49.1	51.0	58.8	41.2	46.6	
SW	2.0	8.4	6.1	.6	.0	.0		17.2	10.1	21.9	12.5	17.8	12.1	13.5	17.6	17.5	20.5	
W	1.6	2.3	.5	.1	.0	.0		4.4	6.2	3.6	.0	3.4	2.6	2.5	.0	7.0	4.4	
NW	1.6	2.7	.9	.0	.0	.0		5.2	7.0	5.6	10.7	4.5	2.6	4.2	.0	8.2	3.9	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	6.7							6.7	.0	6.9	.0	8.5	8.0	8.0	.0	4.6	5.4	
TOT OBS	591	1165	836	154	23	0	2769		9.5	449	14	496	398	424	17	676	295	
TOT PCT	21.3	42.1	30.2	5.6	.8	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	06	12	18
N	4.7	2.7	.7	.2	.0		8.3	7.7	7.0	7.5	7.8	9.7
NE	2.0	.7	.1	.0	.0		2.8	5.8	2.1	2.5	2.9	3.3
E	1.2	.3	.0	.0	.0		1.5	4.5	1.2	1.8	2.0	1.2
SE	2.2	3.9	1.3	.4	.0		7.9	11.5	5.8	10.3	8.2	6.5
S	13.0	21.5	10.1	1.4	.0		46.0	11.7	44.4	47.7	51.3	42.9
SW	6.2	7.7	3.2	.2	.0		17.2	10.1	21.7	15.3	13.7	18.4
W	2.9	1.3	.2	.1	.0		4.4	6.2	5.4	3.0	2.4	6.2
NW	3.0	1.8	.4	.0	.0		5.2	7.0	5.8	3.7	4.0	6.9
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	6.7						6.7	.0	6.7	8.3	7.7	4.8
TOT OBS	1160	1105	441	62	1	2769		9.5	463	894	441	971
TOT PCT	41.9	39.9	15.9	2.2	.0		100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1865-1978

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TABLE 4

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
00003	6.7	13.4	43.4	31.3	4.1	1.1	.0	9.4	100.0	463
06009	8.3	14.5	43.1	28.9	4.8	.4	.0	8.9	100.0	894
12015	7.7	16.3	38.5	30.6	6.3	.5	.0	9.6	100.0	441
18071	4.8	14.5	42.1	30.7	6.6	1.2	.0	10.1	100.0	971
TOT	186	405	1165	836	154	23	0	9.5		2769
PCT	6.7	14.6	42.1	30.2	5.6	.8	.0		100.0	

TABLE 5

WIND DIR	PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS) BY WIND DIRECTION					MEAN CLOUD COVER
	0-2	3-4	5-7	8 & 10	TOTAL OBS	
N	1.8	.5	.9	3.6		5.0
NE	.3	.0	1.4	.4		6.0
E	.5	.1	.0	.5		4.1
SE	.7	.1	.3	.8		4.5
S	25.1	6.4	9.2	12.3		3.9
SW	13.2	1.0	4.0	4.2		3.1
W	1.7	.3	.0	.8		3.1
NW	2.4	.0	1.0	.4		3.3
VAR	.0	.0	.0	.0		4.0
CALM	2.5	.3	.5	2.7		4.5
TOT OBS	176	32	63	94	365	3.7
TOT PCT	48.2	8.8	17.3	25.8	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH > 4/8) AND OCCURRENCE OF NH < 5/8 BY WIND DIRECTION													TOTAL OBS
000	150	300	600	1000	2000	3500	5000	6500	8000+	NH < 5/8	ANY HGT		
149	299	599	999	1999	3499	4999	6499	7999					
.8	.0	.0	.3	1.6	1.0	.2	.3	.0	.0	.0	.0	2.6	
.0	.0	.3	.0	.3	.1	.1	.0	.0	.0	.0	.0	1.4	
.3	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	
.3	.0	.0	.0	.3	.3	.0	.1	.0	.0	.0	.0	.8	
.5	.2	.8	3.9	6.6	4.7	1.5	.7	.0	.5	.5	.5	33.8	
1.4	.1	.5	1.6	1.4	1.7	.3	.0	.0	.0	.0	.0	15.5	
.3	.0	.0	.0	.3	.2	.0	.0	.0	.0	.0	.0	2.0	
.3	.0	.0	.3	.3	.3	.0	.0	.0	.0	.0	.0	2.7	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.3	.0	.0	1.1	1.1	.8	.0	.0	.0	.0	.0	.0	2.7	
.5	1	7	28	43	33	7	4	0	2	227		365	
4.1	.3	1.9	7.1	11.8	9.0	1.9	1.1	.0	.5	62.2		100.0	

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH > 4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	> 10	> 5	> 2	> 1	> 1/2	> 1/4	> 50YD	> 0
> 6500	.3	.3	.5	.5	.5	.5	.5	.5
> 5000	.8	1.1	1.6	1.6	1.6	1.6	1.6	1.6
> 3500	2.4	3.2	3.7	3.7	3.7	3.7	3.7	3.7
> 2000	9.8	12.0	12.8	12.8	12.8	12.8	12.8	12.8
> 1000	17.3	22.1	23.9	23.9	24.2	24.5	24.5	24.5
> 600	21.5	28.7	31.1	31.1	31.4	31.6	31.6	31.6
> 300	22.1	30.1	33.0	33.0	33.2	33.5	33.5	33.5
> 150	22.1	30.3	33.2	33.2	33.5	33.8	33.8	33.8
> 0	22.3	30.6	33.8	35.1	35.6	36.2	37.5	37.8
TOTAL	84	115	127	132	134	136	141	142

TOTAL NUMBER OF OBSI 376

PCT FREQ NH < 5/8 62.2

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
31.4	13.9	7.7	3.9	4.4	2.8	4.9	6.4	20.8	3.9	389

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1865-1978

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.4	.2	.2	.0	.0	.4	.4	.2	.0	.9	2.8	
	TOT %	.4	.2	.2	.0	.0	.4	.4	.2	.0	.9	2.8	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.1	.1	.0	.0	.0	.2	.4	
	TOT %	.0	.0	.0	.0	.1	.1	.0	.0	.0	.2	.4	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.2	.0	.3	.5	.3	.0	.0	.0	.4	1.8	
	TOT %	.0	.2	.0	.3	.5	.3	.0	.0	.0	.4	1.8	
2<5	PCP	.2	.1	.0	.0	.2	.0	.0	.0	.0	.0	.4	
	NO PCP	.2	.0	.0	.0	1.5	.9	.2	.7	.0	.7	4.2	
	TOT %	.4	.1	.0	.0	1.8	.9	.2	.7	.0	.7	4.6	
5<10	PCP	.0	.0	.0	.0	.1	.3	.0	.0	.0	.4	.9	
	NO PCP	3.2	.4	.2	.9	9.8	4.6	.4	.8	.0	1.5	21.9	
	TOT %	3.2	.4	.2	.9	10.0	4.9	.4	.8	.0	2.0	22.8	
10+	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	
	NO PCP	1.8	1.4	.5	1.2	37.0	17.0	3.0	3.4	.0	2.2	67.4	
	TOT %	1.8	1.4	.5	1.2	37.0	17.0	3.0	3.4	.0	2.4	67.6	
TOT OBS													457
TOT PCT		5.7	2.2	1.0	2.4	49.3	23.7	4.0	5.1	.0	6.6	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.1	.0	.0	.1	.0	.1	.3	.1	.0	.7	1.6	
	4-10	.1	.1	.1	.0	.4	.5	.0	.0	.0		1.3	
	11-21	.0	.0	.0	.0	.2	.1	.0	.0	.0		.3	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	
	TOT %	.3	.1	.1	.1	.6	.7	.3	.1	.0	.7	3.2	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	
	11-21	.0	.0	.0	.0	.1	.1	.0	.0	.0		.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	
	TOT %	.0	.0	.0	.0	.1	.1	.0	.0	.0	.1	.3	
1<2	0-3	.0	.1	.0	.0	.1	.1	.0	.0	.0	.4	.7	
	4-10	.0	.0	.0	.1	.2	.1	.0	.0	.0		.4	
	11-21	.0	.0	.0	.0	.0	.2	.0	.0	.0		.9	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	
	TOT %	.0	.1	.0	.2	.9	.4	.0	.0	.0	.4	2.0	
2<5	0-3	.3	.0	.0	.1	.3	.5	.1	.0	.0	.6	1.9	
	4-10	.2	.0	.0	.1	1.5	.5	.0	.4	.0		2.8	
	11-21	.0	.0	.0	.0	.7	.1	.0	.1	.0		.9	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	
	TOT %	.5	.0	.0	.3	2.5	1.1	.1	.5	.0	.6	5.6	
5<10	0-3	.3	.0	.1	.0	.4	.7	.0	.1	.0	2.0	3.8	
	4-10	1.6	.2	.0	.7	4.8	1.6	.1	.5	.0		9.5	
	11-21	.9	.1	.0	.1	3.3	1.6	.1	.1	.0		6.3	
	22+	.0	.0	.0	.0	.7	.2	.0	.0	.0		.9	
	TOT %	2.9	.3	.1	.7	9.2	4.1	.3	.8	.0	2.0	20.5	
10+	0-3	.7	.5	.1	.1	2.8	.7	.5	.6	.0	5.0	11.0	
	4-10	.8	.8	.4	.6	10.5	6.9	1.4	1.5	.0		23.0	
	11-21	.8	.1	.0	.4	18.7	9.1	.1	.7	.0		30.0	
	22+	.0	.0	.0	.1	3.6	.8	.0	.0	.0		4.5	
	TOT %	2.3	1.4	.5	1.2	35.6	17.5	2.1	2.9	.0	5.0	68.4	
TOT OBS													684
TOT PCT		5.9	2.1	.8	2.5	48.9	23.8	2.8	4.3	.0	8.9	100.0	

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1865-1978

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	3.3	.0	1.1	4.4	8.8	11.0	2.2	.0	.0	1.1	31.9	68.1	91
06009	4.2	.0	2.1	6.3	12.6	9.5	1.1	2.1	.0	1.1	38.9	61.1	95
12015	2.9	.0	2.9	10.8	12.7	4.9	3.9	2.0	.0	.0	40.2	59.8	102
18021	5.4	1.1	1.1	6.5	12.0	10.9	1.1	.0	.0	.0	38.0	62.0	92
TOT	15	1	7	27	44	34	8	4	0	2	142	238	380
PCT	3.9	.3	1.8	7.1	11.6	8.9	2.1	1.1	.0	.5	37.4	62.6	100.0

TABLE 11

PERCENT FREQUENCY VS BY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	2.1	.0	2.1	4.8	20.5	70.5	146
06009	3.6	.9	.9	5.8	17.9	70.9	223
12015	3.8	.0	4.4	5.0	21.4	65.4	159
18021	2.9	.0	1.8	5.9	24.1	65.3	170
TOT	22	2	15	38	145	476	698
PCT	3.2	.3	2.1	5.4	20.8	68.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VS BY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <30YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	3.4	5.6	11.2	21.3	67.4	89
06009	4.3	7.4	17.0	23.4	59.6	94
12015	4.0	6.9	23.8	20.8	55.4	101
18021	5.4	7.6	15.2	22.8	62.0	92
TOT	16	26	64	83	229	376
PCT	4.3	6.9	17.0	22.1	60.9	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
70/74	.0	.0	.0	.5	1.2	.5	1.0	.0	13	3.1
65/69	.0	.0	.2	.2	1.7	6.5	5.6	1.4	65	15.7
60/64	.0	.0	.0	.2	2.4	7.5	17.9	10.1	158	38.2
55/59	.0	.0	.2	.5	1.0	3.6	19.8	15.9	170	41.1
50/54	.0	.0	.0	.0	.0	.2	1.0	.7	8	1.9
TOTAL	0	0	2	6	26	76	187	117	414	100.0
PCT	.0	.0	.5	1.4	6.3	18.4	45.2	28.3		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
70/74	.0	.2	.1	.2	1.6	.2	.2	.5	.0	.0
65/69	.7	.3	.0	.2	7.9	3.3	.7	1.9	.0	.7
60/64	2.5	.8	1.0	.7	17.1	9.7	2.1	1.9	.0	2.4
55/59	1.9	1.1	.2	1.4	23.0	8.3	.4	1.3	.0	3.4
50/54	.2	.0	.0	.0	1.4	.3	.0	.0	.0	.0
TOTAL	5.4	2.5	1.3	2.5	51.0	21.7	3.5	5.6	.0	6.5

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	72	70	67	60	55	53	52	60.4	476
06009	70	66	64	59	54	52	50	58.6	905
12015	74	69	66	59	54	52	51	59.6	445
18021	79	73	69	63	56	54	52	62.7	867
TOT	79	71	67	60	55	52	50	60.4	2693

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	2.6	4.3	17.1	50.4	25.6	84	117		
06009	.0	.8	3.4	12.6	44.5	38.7	87	119		
12015	.0	.9	6.0	13.8	46.6	32.8	85	116		
18021	.0	2.6	11.3	30.4	39.1	16.5	80	115		
TOT	0	8	29	86	211	133	84	467		

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DJF	53 56	57 60	61 64	65 68	69 72	73 76	TOT	W FOG	WD FOG
14/16	.0	.0	.2	.0	.2	.0	2	.0	.5
11/13	.0	.0	.0	1.0	.7	.0	7	.2	1.5
9/10	.0	.0	.2	.5	.2	.0	4	.0	1.0
7/8	.0	.5	1.2	.2	.0	.0	8	.0	1.9
6	.0	.2	1.5	.5	.2	.0	10	.0	2.4
5	.0	1.0	.7	1.0	.5	.2	14	.2	3.1
4	.0	1.0	2.2	.5	.2	.0	16	.5	3.4
3	.7	4.8	1.0	1.0	.2	.0	32	1.2	6.5
2	1.5	4.4	2.7	1.5	1.0	.0	45	.2	10.7
1	2.2	4.4	3.9	2.9	.5	.0	57	.2	13.6
0	2.7	4.6	5.6	1.9	.0	.0	61	1.5	13.3
-1	1.2	5.6	2.7	2.2	.0	.0	48	1.0	10.7
-2	1.2	5.6	1.9	2.7	.0	.0	47	1.5	9.9
-3	.5	2.9	1.5	.2	.0	.0	21	.5	4.6
-4	.7	2.4	1.0	.2	.0	.0	18	.5	3.9
-5	1.0	2.7	.2	.0	.0	.0	16	.7	3.1
-6	.2	.5	.2	.0	.0	.0	4	.2	.7
-7/-8	.0	.2	.2	.0	.0	.0	2	.0	.3
-9/-10	.0	.2	.0	.0	.0	.0	1	.0	.3
TOTAL	49	111	10	10	1	413	35	378	
PCT	11.9	40.9	26.9	16.2	3.9	.2	100.0	8.5	91.5

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.5
1-2	.0	1.4	1.4	.0	.0	.0	2.9	.0	.5	.1	.0	.0	.0	.7
3-4	.0	.9	.0	.0	.0	.0	.9	.5	.1	.0	.0	.0	.0	.7
5-6	.0	.5	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.9	1.4	.0	.0	.0	4.3	1.0	.7	.1	.0	.0	.0	1.8

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	1.0	.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.5	.5	.0	.0	.0	1.0
3-4	.0	.5	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.6	.0	.0	.0	.0	1.6	.0	.5	.5	.0	.0	.0	1.0

PERIOD: (OVER-ALL) 1963-1978

MARCH

AREA 0028 VALPARAISO
34.65 73.0W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	1.4	2.0	.0	.0	.0	.0	3.4	1.2	.7	.0	.0	.0	.0	1.8	
1-2	.5	5.9	6.9	.0	.0	.0	13.3	.5	3.1	3.5	.0	.0	.0	7.2	
3-4	.5	5.9	8.7	.5	.0	.0	15.6	.0	1.0	4.8	.5	.0	.0	6.4	
5-6	.0	2.0	5.6	.0	.0	.0	7.6	.0	1.2	1.7	.5	.0	.0	3.4	
7	.0	.5	5.7	.5	.0	.0	6.8	.0	.0	1.6	.0	.0	.0	1.6	
8-9	.0	.0	.4	1.0	.0	.0	1.6	.0	.0	.5	.0	.0	.0	.5	
10-11	.0	.0	1.7	.5	.0	.0	2.2	.0	.0	.4	.0	.0	.0	.4	
12	.0	.0	.5	1.6	.0	.0	2.1	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	1.6	.0	.0	1.6	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.5	.0	.5	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	2.5	16.1	29.7	5.7	.5	.0	54.6	1.7	6.0	12.5	1.0	.0	.0	21.2	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.9	.0	.0	.0	.0	.0	.9	.7	1.0	.0	.0	.0	.0	1.7	
1-2	.5	.8	1.0	.0	.0	.0	2.3	.5	.8	1.0	.0	.0	.0	2.3	
3-4	.5	.4	.0	.0	.0	.0	.9	.0	.5	.0	.0	.0	.0	.5	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	2.0	1.2	1.0	.0	.0	.0	4.2	1.2	2.3	1.0	.0	.0	.0	4.6	93.2

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT DBS
<1	10.9	6.7	.0	.0	.0	.0	15.6	
1-2	2.1	13.0	14.6	.0	.0	.0	29.7	
3-4	1.6	9.4	13.5	1.0	.0	.0	25.5	
5-6	.5	3.6	7.3	.5	.0	.0	12.0	
7	.0	.5	7.3	.5	.0	.0	8.3	
8-9	.0	.0	1.0	1.0	.0	.0	2.1	
10-11	.0	.0	2.1	.5	.0	.0	2.6	
12	.0	.0	.5	1.6	.0	.0	2.1	
13-16	.0	.0	.0	1.6	.0	.0	1.6	
17-19	.0	.0	.0	.0	.5	.0	.5	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	15.1	31.3	46.4	6.8	.5	.0	100.0	192

PERIOD: (OVER-ALL) 1950-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.2	9.1	12.7	5.2	2.8	1.4	1.7	.8	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	181	4
6-7	.0	2.5	5.2	6.9	4.1	5.5	1.7	.0	2.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	102	6
8-9	.0	1.7	3.3	2.5	3.0	1.7	1.4	1.9	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	60	7
10-11	.0	2.8	1.1	1.9	1.4	1.1	.0	.6	.8	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	36	6
12-13	.0	.0	.8	.3	.3	.6	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	10	7
>13	.0	.0	.0	.3	.0	.0	.0	.0	.8	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	5	14
INDET	3.9	.8	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	19	1
TOTAL	22	61	84	64	42	37	19	13	19	0	2	0	0	0	0	0	0	0	0	363	5
PCT	6.1	16.8	23.1	17.6	11.6	10.2	5.2	3.6	5.2	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977

APRIL

AREA 0028 VALPARAISO
34.05 72.9W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWK	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
N	11.2	2.0	.0	.0	.0	.0	.0	13.3	6.6	.0	10.7	.0	5.1	.0	64.3
NE	3.7	.0	.0	.0	.0	.0	.0	3.7	.0	.0	5.2	.0	7.4	.0	83.7
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	21.1	.0	7.0	.0	71.9
SE	4.2	.0	.0	.0	.0	.0	.0	4.2	1.1	.0	8.4	4.2	4.2	.0	77.9
S	.4	.0	1.0	.0	.0	.0	.0	1.4	.8	.0	6.4	.0	2.3	.0	89.2
SW	.2	.0	2.3	.0	.0	.0	.0	2.7	.2	.0	13.8	2.7	.4	.0	80.2
W	.0	.0	2.4	.0	.0	.0	.0	2.4	.0	.0	6.0	7.1	9.5	.0	75.0
NW	.8	.0	7.6	.0	.0	.0	.0	8.4	2.3	.0	10.7	.8	12.2	.0	65.6
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	3.2	.0	.0	.0	.0	3.2	.0	.0	22.6	.0	9.7	.0	64.5
TOT PCT	1.7	.2	1.7	.0	.0	.0	.0	3.6	1.1	.0	10.1	1.1	4.0	.0	79.9
TOT OBS:	523														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN CMHR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
0000Z	1.6	.0	1.6	.0	.0	.0	.0	3.1	.0	.0	6.3	1.6	3.9	.0	85.2
0600Z	1.4	.0	2.1	.0	.0	.0	.0	3.5	2.1	.0	11.3	.7	2.8	.0	79.4
1201Z	3.0	.8	.8	.0	.0	.0	.0	4.5	2.3	.0	15.2	2.3	4.5	.0	71.2
1802Z	.8	.0	2.3	.0	.0	.0	.0	3.0	.0	.0	9.0	.0	6.0	.0	82.0
TOT PCT	1.7	.2	1.7	.0	.0	.0	.0	3.6	1.1	.0	10.5	1.1	4.3	.0	79.4
TOT OBS:	534														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	2.0	5.1	2.6	.7	.1	.0		10.5	9.5	10.1	4.7	10.1	8.8	10.1	5.4	12.8	9.7	
NE	1.0	2.5	.7	.3	.0	.0		4.5	8.6	4.3	1.6	4.1	4.7	5.9	16.1	4.6	2.7	
E	.8	1.4	.3	.1	.0	.0		2.6	6.4	2.2	6.3	1.6	3.5	3.6	.0	2.5	2.0	
SE	1.2	3.2	2.5	.9	.2	.0		8.0	11.5	4.7	.0	5.6	11.2	9.8	.0	9.2	7.9	
S	2.9	15.2	16.5	4.2	.6	.0		39.3	12.6	39.9	20.3	47.3	41.8	40.4	28.6	32.9	36.1	
SW	2.3	7.4	5.6	1.1	.0	.0		16.5	10.4	19.5	42.2	15.4	13.7	13.0	14.3	16.9	19.9	
W	1.4	2.1	.7	.2	.1	.0		4.5	7.9	4.5	.0	3.0	2.4	3.0	21.4	6.0	7.9	
NW	1.4	3.7	1.7	.4	.1	.0		7.4	9.0	6.4	6.3	6.5	5.4	5.4	7.1	10.1	9.7	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	6.9							6.9	.0	8.4	18.8	6.4	8.4	8.8	7.1	4.9	4.0	
TOT OBS	552	1127	847	220	31	1	2778		10.1	451	16	484	391	456	14	669	297	
TOT PCT	19.9	40.6	30.5	7.9	1.1	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+						00	06	12	18
N	4.6	4.3	1.1	.3	.1			10.5	9.5	9.9	9.5	10.0	11.8	
NE	2.7	1.3	.3	.1	.1			4.5	8.6	4.2	4.4	6.2	4.0	
E	1.9	.5	.2	.0	.0			2.6	6.4	2.3	2.5	3.5	2.4	
SE	2.7	3.2	1.5	.5	.0			8.0	11.5	4.6	8.1	9.5	8.8	
S	8.7	19.7	9.2	1.5	.1			39.3	12.6	39.2	44.8	40.0	33.9	
SW	5.7	7.4	3.2	.2	.0			16.5	10.4	20.3	14.7	13.1	17.8	
W	2.5	1.5	.4	.1	.0			4.5	7.9	4.4	2.7	3.6	6.6	
NW	3.2	3.2	.8	.1	.0			7.4	9.0	6.4	6.0	5.4	10.0	
VAR	.0	.0	.0	.0	.0			.0	.0	.0	.0	.0	.0	
CALM	6.9							6.9	.0	8.8	7.3	8.7	4.7	
TOT OBS	1081	1143	465	80	9	2778			10.1	467	875	470	966	
TOT PCT	38.9	41.1	16.7	2.9	.3			100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977

APRIL

AREA 0028 VALPARAISO
34.65 72.9W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
00003	8.8	9.9	39.8	41.5	8.8	1.1	.2	10.5	100.0	467
06009	7.3	14.2	41.3	29.7	6.7	.8	.0	9.6	100.0	875
12015	8.7	14.7	40.2	28.9	7.0	.4	.0	9.4	100.0	470
18021	4.7	12.6	40.5	31.5	9.0	1.8	.0	10.8	100.0	966
TOT	191	361	1127	847	220	31	1	10.1		2778
PCT	6.9	13.0	40.6	30.5	7.9	1.1	*	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & MUSCD	TOTAL OBS	MEAN CLOUD COVER
N	1.5	1.0	1.4	5.0		6.0
NE	.6	.1	1.2	1.5		6.1
E	.8	.1	.5	.3		3.8
SE	.7	1.2	.3	1.6		5.0
S	21.4	5.0	5.8	7.4		3.2
SW	15.5	2.6	2.6	5.4		2.9
W	1.7	.2	1.0	1.4		4.6
NW	1.0	1.5	1.0	1.6		4.8
VAR	.0	.0	.0	.0		.0
CALM	2.4	.5	1.1	3.0		4.7
TOT OBS	168	45	55	100	368	3.8
TOT PCT	45.7	12.2	14.9	27.2	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.7	.0	.5	2.0	2.2	.2	.0	.0	.0	.0	3.2	
NE	.1	.3	.0	.1	1.3	.5	.3	.0	.0	.0	1.7	
E	.0	.0	.0	.0	.3	.3	.0	.0	.0	.0	1.0	
SE	.3	.0	.0	.1	1.0	.6	.0	.0	.0	.0	1.9	
S	1.2	.3	.5	1.8	5.6	.9	.5	.3	.0	.3	28.3	
SW	1.2	.0	.0	1.2	2.3	1.8	.1	.0	.0	.0	19.5	
W	.3	.0	.0	.2	1.0	.0	.3	.0	.0	.0	2.6	
NW	.3	.0	.0	.1	1.6	.1	.1	.0	.0	.0	2.9	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.8	.0	.5	.0	.8	.8	.3	.0	.0	.3	3.5	
TOT OBS	18	2	6	20	59	19	6	1	0	3	234	368
TOT PCT	4.9	.5	1.6	5.4	16.0	5.2	1.6	.3	.0	.8	63.6	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.5	.8	.8	.8	.8	.8	.8	.8
>5000	.8	1.1	1.1	1.1	1.1	1.1	1.1	1.1
>3500	2.1	2.4	2.4	2.7	2.7	2.7	2.7	2.7
>2000	5.4	7.2	7.5	7.8	7.8	7.8	7.8	7.8
>1000	15.3	22.3	23.3	23.6	23.9	24.1	24.1	24.1
>600	17.4	27.1	28.7	29.0	29.5	29.8	29.8	29.8
>300	18.2	28.7	30.3	30.6	31.1	31.4	31.4	31.4
>150	18.5	29.0	30.8	31.1	31.6	31.9	31.9	31.9
>0	19.0	30.0	33.0	33.2	34.3	35.4	36.5	36.7
TOTAL	71	112	123	124	128	132	136	137

TOTAL NUMBER OF OBS: 373

PCT FREQ NH <5/8: 63.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	DBSCD	TOTAL OBS
	39.1	11.3	7.2	8.2	2.8	3.3	3.1	6.4	21.3	3.3	390

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977

APRIL

AREA 0028 VALPARAISO
34.65 72.9W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VISBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.4	.0	.0	.2	1.3	1.6	.1	.2	.0	1.0	4.8	
	TOT %	.4	.0	.0	.2	1.3	1.6	.1	.2	.0	1.0	4.8	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.2	.5	1.1	.1	.1	.0	.0	1.9	
	TOT %	.0	.0	.0	.2	.5	1.1	.1	.1	.0	.0	1.9	
1<2	PCP	.0	.0	.0	.0	.0	.0	.1	.3	.0	.0	.4	
	NO PCP	.6	.1	.2	.2	.4	.0	.4	.7	.0	.6	3.1	
	TOT %	.6	.1	.2	.2	.4	.0	.5	1.0	.0	.6	3.4	
2<5	PCP	.1	.0	.0	.0	.0	.2	.0	.2	.0	.0	.6	
	NO PCP	.7	.2	.4	.2	.3	.5	.4	.5	.0	.2	3.4	
	TOT %	.8	.3	.4	.2	.3	.7	.4	.7	.0	.2	4.0	
5<10	PCP	.9	.0	.0	.0	.4	.4	.0	.0	.0	.2	1.9	
	NO PCP	2.2	2.1	1.1	.4	7.7	5.4	.2	1.7	.0	.8	21.6	
	TOT %	3.2	2.1	1.1	.4	8.1	5.7	.2	1.7	.0	1.0	23.5	
10+	PCP	.2	.2	.0	.2	.1	.0	.0	.0	.0	.0	.8	
	NO PCP	4.3	3.8	1.0	3.2	26.7	14.1	2.6	2.6	.0	3.3	61.6	
	TOT %	4.4	4.0	1.0	3.4	26.9	14.1	2.6	2.6	.0	3.3	62.3	
TOT OBS		523											
TOT PCT		9.4	6.5	2.7	4.5	37.5	23.2	4.0	6.3	.0	5.9	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VISBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.1	.3	.4	.1	.1	.0	.8	1.8	
	4-10	.2	.0	.1	.0	.5	.6	.0	.1	.0		1.5	
	11-21	.1	.0	.0	.0	.3	.3	.0	.0	.0		.6	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	
	TOT %	.3	.0	.1	.1	1.0	1.3	.1	.2	.0	.8	4.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.4	
	4-10	.0	.0	.0	.0	.2	.0	.1	.1	.0		.4	
	11-21	.0	.0	.0	.1	.2	.3	.0	.0	.0		.6	
	22+	.1	.0	.0	.0	.0	.0	.0	.0	.0		.1	
	TOT %	.1	.0	.0	.1	.4	.7	.1	.1	.0	.0	1.5	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.5	
	4-10	.1	.1	.1	.1	.4	.0	.3	.4	.0		1.5	
	11-21	.3	.0	.0	.0	.0	.0	.0	.2	.0		.5	
	22+	.4	.1	.0	.0	.0	.0	.0	.1	.0		.5	
	TOT %	.8	.1	.1	.1	.4	.0	.3	.7	.0	.5	3.1	
2<5	0-3	.0	.0	.1	.0	.3	.1	.2	.3	.0	.8	1.8	
	4-10	.3	.1	.0	.1	.1	.5	.2	.1	.0		1.4	
	11-21	.1	.0	.0	.0	.2	.0	.0	.1	.0		.5	
	22+	.2	.0	.1	.0	.0	.0	.0	.0	.0		.4	
	TOT %	.5	.2	.3	.1	.5	.7	.4	.6	.0	.8	4.1	
5<10	0-3	.2	.2	.1	.3	.9	1.4	.0	.4	.0	1.4	4.9	
	4-10	1.5	1.8	.7	.0	3.2	2.1	.4	1.0	.0		10.7	
	11-21	.9	.3	.1	.1	2.4	1.9	.0	.2	.0		5.9	
	22+	.5	.1	.0	.2	1.0	.2	.0	.1	.0		2.2	
	TOT %	3.1	2.4	1.0	.5	7.4	5.7	.4	1.7	.0	1.4	23.7	
10+	0-3	.4	.2	.2	.7	1.1	1.3	.4	.4	.0	3.8	8.6	
	4-10	2.2	1.6	.1	1.8	8.6	6.2	1.4	1.7	.0		23.7	
	11-21	1.3	.7	.4	.8	13.9	6.5	.5	.6	.0		24.8	
	22+	.0	.4	.0	.2	4.1	2.0	.0	.0	.0		6.6	
	TOT %	3.9	2.9	.8	3.5	27.7	16.0	2.3	2.7	.0	3.8	63.7	
TOT OBS		782											
TOT PCT		8.8	5.7	2.2	4.5	37.5	24.4	3.6	5.9	.0	7.3	100.0	

APRIL

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977

TABLE 10

AREA 0028 VALPARAISO
34.05 72.9WPERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	4.5	.0	.0	3.7	10.2	3.4	1.1	.0	.0	1.1	26.1	73.9	88
06009	6.8	.0	1.0	3.9	14.6	4.9	1.0	1.0	.0	1.0	34.0	66.0	103
12015	4.2	2.1	3.2	6.3	23.2	7.4	1.1	.0	.0	1.1	48.4	51.6	95
18021	3.2	.0	2.1	6.3	15.8	4.2	3.2	.0	.0	.0	34.7	65.3	95
TOT PCT	18 4.7	2 .5	6 1.6	21 5.5	61 16.0	19 5.0	6 1.6	1 .3	0 .0	3 .8	137 36.0	244 64.0	381 100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	2.3	1.2	3.5	4.7	22.7	65.7	172
06009	2.5	2.1	2.5	3.3	25.4	64.2	240
12015	8.0	2.3	2.3	2.8	23.3	61.4	176
18021	3.4	1.9	4.4	5.3	25.2	59.7	206
TOT PCT	31 3.9	15 1.9	25 3.1	32 4.0	193 24.3	498 62.7	794 100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NH >4/8) BY HOUR

HOURL (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	4.5	5.7	14.8	14.8	70.5	88
06009	6.9	8.9	14.9	21.8	63.4	101
12015	4.3	14.0	22.6	31.2	46.2	93
18021	3.3	7.7	18.7	20.9	60.4	91
TOT PCT	18 4.8	34 9.1	66 17.7	83 22.3	224 60.1	373 100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
70/74	.0	.0	.0	.0	.2	.2	.0	.0	2	.4
65/69	.0	.0	.0	.2	.2	.7	1.6	1.2	22	3.9
60/64	.0	.0	.0	.0	1.1	7.7	16.3	8.1	189	33.2
55/59	.0	.0	.0	.0	1.9	10.2	21.2	17.4	289	50.7
50/54	.0	.0	.0	.0	.4	.5	4.2	6.5	66	11.6
45/49	.0	.0	.0	.0	.0	.0	.2	.2	2	.4
TOTAL	0	0	0	1	21	110	248	190	570	100.0
PCT	.0	.0	.0	.2	3.7	19.3	43.5	33.3		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
70/74	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0
65/69	.0	.5	.4	.2	.7	.8	.6	.4	.0	.4
60/64	4.1	2.6	1.0	1.0	10.3	5.6	2.1	4.0	.0	2.5
55/59	4.6	2.9	1.4	1.4	19.8	13.4	2.1	2.0	.0	3.0
50/54	.6	.6	.0	1.0	4.4	2.4	.5	.0	.0	2.1
45/49	.0	.0	.2	.0	.0	.0	.0	.2	.0	.0
TOTAL	9.3	6.7	2.9	3.6	35.4	22.4	5.3	6.5	.0	7.9

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	74	66	64	58	53	52	48	58.2	468
06009	65	64	62	57	52	50	49	56.9	881
12015	68	64	63	57	52	50	47	57.1	464
18021	80	70	67	60	55	52	46	60.3	911
TOT	80	68	64	58	53	50	46	58.3	2724

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	1.5	17.0	45.2	36.3	87	135		
06009	.0	.0	1.9	16.0	39.7	42.3	88	156		
12015	.0	.0	4.2	13.9	42.4	39.6	87	144		
18021	.0	1.3	7.1	27.1	46.5	18.1	82	155		
TOT	0	2	22	110	256	200	86	590		

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977

APRIL

TABLE 17

AREA 0028 VALPARAISO
34.05 72.9W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	63 68	69 72	73 76	TOT	W FOG	NO FOG
14/16	.0	.0	.0	.0	.0	.2	.0	1	.0	.2
11/13	.0	.0	.0	.0	.4	.0	.2	3	.0	.7
9/10	.0	.0	.2	.4	.2	.0	.0	4	.0	.9
7/8	.0	.0	.9	1.6	.0	.0	.0	11	.7	1.8
6	.0	.0	.2	1.3	.4	.0	.0	9	.0	2.0
5	.0	.2	.7	1.1	.0	.0	.0	9	.0	2.0
4	.0	.0	1.6	1.3	.0	.0	.2	14	.2	2.9
3	.0	.7	4.4	1.3	.4	.0	.0	31	.4	6.4
2	.0	2.0	4.4	2.2	.2	.0	.0	40	1.6	7.3
1	.0	5.1	3.8	4.7	.2	.2	.0	63	1.1	12.9
0	.0	2.2	6.9	3.3	.7	.0	.0	59	.9	12.2
-1	1.1	2.4	6.4	2.9	.7	.0	.0	61	.4	13.1
-2	.7	2.9	5.1	1.6	.4	.0	.0	48	.2	10.4
-3	.9	3.1	4.0	1.3	.2	.0	.0	43	2.4	7.1
-4	.9	1.6	1.8	.2	.2	.0	.0	21	.7	4.0
-5	.4	2.0	1.3	.2	.2	.0	.0	19	.4	3.8
-6	.4	.2	.4	.4	.0	.0	.0	7	.2	1.3
-7/-8	.0	.4	.4	.0	.2	.0	.0	5	.0	1.1
-9/-10	.0	.0	.4	.0	.0	.0	.0	2	.2	.2
TOTAL	20		194		21		2	450	43	407
PCT	4.4	22.9	43.1	24.0	4.7	.4	.4	100.0	9.6	90.4

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	1.1	.0	.0	.0	.0	1.1	.0	.2	.0	.0	.0	.0	.2
1-2	.0	3.1	.4	.0	.0	.0	3.5	.4	1.5	.0	.0	.0	.0	2.0
3-4	.0	.4	1.5	.0	.0	.0	2.0	.0	.4	.5	.0	.0	.0	1.0
5-6	.0	.4	1.5	.0	.0	.0	2.0	.0	.0	.1	.0	.0	.0	.1
7	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1
8-9	.0	.0	.0	.4	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	5.0	3.5	.4	.0	.0	9.0	.5	2.2	.7	.0	.0	.0	3.4

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.9
1-2	.0	.4	.4	.0	.0	.0	.9	.0	.4	.0	.0	.0	.0	.4
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.9
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.1	.0	.0	1.0
7	.3	.0	.0	.0	.0	.0	.3	.0	.0	.1	.0	.0	.0	.1
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.3	.4	.4	.0	.0	.0	1.2	.9	1.3	1.0	.1	.0	.0	3.3

PERIOD: (OVER-ALL) 1963-1977

APRIL

AREA 0028 VALPARAISO
34.65 72.9M

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.4	1.3	.0	.0	.0	.0	1.8	1.4	.4	.4	.0	.0	.0	2.3
1-2	.0	7.0	3.4	.0	.0	.0	10.4	.0	4.1	1.4	.0	.0	.0	5.5
3-4	.0	3.1	9.9	1.0	.0	.0	13.9	.0	2.6	3.1	.8	.0	.0	6.5
5-6	.0	.9	4.3	2.7	.0	.0	7.9	.0	.4	2.3	.2	.0	.0	3.0
7	.0	.4	3.7	1.1	.0	.0	5.3	.0	.0	2.9	.2	.0	.0	3.1
8-9	.0	.0	1.7	.7	.0	.0	1.9	.0	.0	.5	.2	.0	.0	1.2
10-11	.0	.0	.0	1.3	.9	.0	2.2	.0	.0	.4	.0	.0	.0	.4
12	.0	.0	.0	.0	.4	.0	.4	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.4	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.4	12.7	22.5	7.2	1.3	.0	44.2	1.9	7.6	11.1	1.4	.0	.0	21.9

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.3	.4	.0	.0	.0	.0	.8	.4	.4	.0	.0	.0	.0	.9	
1-2	.9	1.2	.0	.0	.0	.0	2.1	.0	.7	.0	.0	.0	.0	.7	
3-4	.0	.4	.7	.0	.0	.0	1.1	.0	.4	1.0	.0	.0	.0	1.4	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.4	.1	.0	.0	.0	.5	
7	.3	.0	.3	.0	.0	.0	.7	.1	.0	.0	.0	.0	.0	.1	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	1.5	2.1	1.0	.0	.0	.0	4.6	.5	2.0	1.1	.0	.0	.0	3.6	91.2

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	13.0	3.9	.4	.0	.0	.0	17.3	
1-2	1.7	18.2	5.6	.0	.0	.0	25.5	
3-4	.0	8.2	16.5	1.7	.0	.0	26.4	
5-6	.0	2.2	9.1	3.0	.0	.0	14.3	
7	.9	.4	6.9	1.3	.0	.0	9.5	
8-9	.4	.0	1.7	1.3	.0	.0	3.5	
10-11	.0	.0	.4	1.3	.9	.0	2.6	
12	.0	.0	.0	.0	.4	.0	.4	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	16.0	32.9	40.7	9.1	1.3	.0	100.0	231

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.2	7.0	9.5	5.3	2.8	4.5	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	114	4
6-7	.0	.0	4.5	12.3	5.0	4.2	1.4	.3	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	104	6
8-9	.0	.3	.8	1.1	5.0	4.2	2.2	1.7	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	58	8
10-11	.0	.6	.0	1.4	.6	1.7	3.9	.8	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	34	9
12-13	.0	.0	1.1	.3	.0	.0	.0	.3	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	8
>13	.0	.0	.0	.8	.3	1.7	.8	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	16	8
INDET	2.2	.8	.6	.0	1.1	.8	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	22	4
TOTAL	16	31	59	76	53	61	33	14	12	2	0	0	0	0	0	0	0	0	0	397	6
PCT	4.5	8.7	16.5	21.3	14.8	17.1	9.2	3.9	3.4	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977

MAY

AREA 0028 VALPARAISO
34.55 73.0W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FDG PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	BLWG DUST	NO SIG WEA
N	10.4	4.6	3.8	.0	.0	.0	.0	17.8	4.6	.0	10.2	.0	1.8	.0	65.6
NE	9.3	6.0	.0	.0	.0	.0	.0	15.3	.7	.0	5.3	.0	.7	.0	78.0
E	17.6	.0	4.4	.0	.0	.0	.0	22.1	.0	.0	17.6	.0	.0	.0	60.3
SE	4.4	.0	1.1	.0	.0	.0	.0	5.5	.0	.0	26.4	.0	.0	.0	68.1
S	.0	.6	.8	.0	.0	.0	.0	1.3	.6	.0	3.4	.8	.8	.0	93.1
SW	.0	.5	.0	.0	.0	.0	.0	.5	.5	.0	5.4	.0	3.3	.0	90.2
W	.0	.0	.0	.0	.0	.0	.0	.0	9.0	.0	.0	.0	2.6	.0	88.5
NW	5.6	.6	8.0	.0	.0	.0	.0	14.2	11.1	.0	7.4	.0	.0	.0	67.3
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	4.3	.0	.0	.0	.0	.0	.0	4.3	.0	.0	21.3	.0	2.1	.0	72.3
TOT PCT	4.8	1.7	2.0	.0	.0	.0	.0	8.3	2.6	.0	8.9	.2	1.3	.0	78.6
TOT OBS:	459														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FDG PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	BLWG DUST	NO SIG WEA
0000	4.6	1.9	.0	.0	.0	.0	.0	6.5	.0	.0	11.1	.0	1.9	.0	80.6
0600	3.9	.0	.7	.0	.0	.0	.0	4.6	2.0	.0	10.5	.7	2.0	.0	80.3
1200	4.0	3.2	4.8	.0	.0	.0	.0	11.1	3.2	.0	11.1	.0	.0	.0	74.6
1800	5.4	1.6	1.6	.0	.0	.0	.0	8.5	3.9	.0	14.7	.0	.8	.0	72.1
TOT PCT	4.5	1.6	1.7	.0	.0	.0	.0	7.6	2.3	.0	11.8	.2	1.2	.0	76.9
TOT OBS:	515														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	2.1	8.3	5.5	1.8	.5	.1		18.2	11.9		17.4	20.8	19.8	15.5	15.8	32.1	21.2	16.9
NE	1.4	3.0	1.9	.4	*	*		6.8	9.3		4.9	2.1	6.2	5.8	8.9	10.7	8.3	5.3
E	.8	2.1	2.3	.1	.0	.0		3.3	6.9		1.2	8.3	2.5	5.3	4.7	.0	3.5	2.4
SE	1.4	4.7	2.9	1.0	.1	.0		10.1	10.7		7.4	.0	9.1	13.0	13.1	.0	10.3	7.5
S	3.4	12.4	11.1	2.5	.2	.0		29.6	11.2		30.6	22.9	31.9	30.8	30.6	44.6	24.0	33.5
SW	1.7	6.2	2.8	.7	*	.0		11.4	9.4		15.1	27.1	11.0	11.4	7.5	12.5	10.6	13.6
W	1.2	2.3	.9	.4	.1	.0		5.0	9.5		5.3	.0	4.5	4.8	2.8	.0	6.3	5.7
NW	1.5	4.3	3.2	1.1	.2	*		10.2	11.6		9.9	10.4	7.9	8.4	10.0	.0	12.7	11.7
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	5.4							5.4	.0		8.2	8.3	7.0	5.0	6.5	.0	3.2	3.3
TOT OBS	571	1305	859	240	35	6	3016		10.1		461	12	525	460	459	14	748	337
TOT PCT	18.9	43.3	28.5	8.0	1.2	.2		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	6.1	7.5	3.4	1.0	.2		18.2	11.9	17.4	17.8	16.3	19.8	
NE	3.2	2.5	.8	.1	*		6.8	9.3	4.8	6.0	8.9	7.4	
E	2.1	.9	.2	.1	.0		3.3	6.9	1.4	3.8	4.5	3.2	
SE	3.9	3.8	2.0	.4	.0		10.1	10.7	7.2	10.9	12.7	9.4	
S	8.9	14.1	5.8	.8	*		29.6	11.2	30.4	31.4	31.0	27.0	
SW	4.7	3.2	1.4	.2	*		11.4	9.4	15.4	11.2	7.7	11.5	
W	2.6	1.5	.6	.3	*		5.0	9.5	5.1	4.7	2.7	6.1	
NW	3.4	4.3	1.9	.6	*		10.2	11.6	9.9	8.1	9.7	12.4	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	5.4						5.4	.0	8.2	6.1	6.3	3.2	
TOT OBS	1217	1199	484	104	12	3016		10.1	473	985	473	1085	
TOT PCT	40.4	39.8	16.0	3.4	.4		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977

MAY

AREA 0028 VALPARAISO
34.55 73.0W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOURL	CALM	1-3	4-10	11-21	22-33	34-47	48+	MEAN	PCT FREQ	TOTAL OBS
0000Z	8.2	14.2	42.1	26.6	7.8	.6	.4	9.7	100.0	473
0600Z	6.1	15.4	42.9	25.9	8.7	.8	.1	9.6	100.0	985
1200Z	6.3	11.8	45.7	28.1	6.3	1.3	.4	10.0	100.0	473
1800Z	3.2	12.2	43.0	31.8	8.0	1.7	.1	10.9	100.0	1085
TOT	164	407	1305	859	240	35	6	10.1		3016
PCT	5.4	13.5	43.3	28.5	8.0	1.2	.2	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 10	TOTAL OBS	MEAN CLOUD COVER
N	1.8	2.4	5.6	14.2		6.6
NE	.9	.2	1.1	3.8		6.3
E	1.2	.0	.5	1.0		4.2
SE	.6	.6	.9	.8		5.3
S	15.0	5.6	4.9	5.5		3.3
SW	4.2	1.8	1.9	1.5		3.6
W	1.4	.2	1.5	1.7		5.3
NW	.5	1.2	3.8	2.9		6.2
VAR	.0	.0	.0	.0		.0
CALM	3.1	.9	1.5	5.2		5.2
TOT OBS	93	42	71	119	325	4.9
TOT PCT	28.6	12.9	21.8	36.6	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
	149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
N	1.5	.9	2.8	4.2	4.5	2.2	1.8	.0	.3	.2	5.2	
NE	.1	.0	.4	1.1	2.0	.2	.0	.0	.1	.3	1.6	
E	.0	.0	.3	.2	.6	.0	.0	.0	.2	.0	1.5	
SE	.0	.0	.3	.1	.6	.0	.1	.0	.2	.0	1.8	
S	.2	.0	.3	.5	2.5	3.1	.2	.0	.0	.0	24.2	
SW	.1	.0	.0	.2	2.2	.2	.0	.0	.0	.0	6.8	
W	.0	.0	.3	1.0	.6	.5	.3	.0	.0	.0	2.1	
NW	.3	.3	.8	1.5	.5	.5	.3	.0	.0	.1	4.1	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.3	.0	.6	.3	1.2	1.8	1.5	.6	.0	.0	4.3	
TOT OBS	8	4	19	30	48	27	14	2	3	2	168	325
TOT PCT	2.5	1.2	5.8	9.2	14.8	8.3	4.3	.6	.9	.6	51.7	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	OR >10	OR >5	OR >2	OR >1	OR >1/2	OR >1/4	OR >50YD	OR >0
OR >6500	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5
OR >5000	1.3	1.8	2.1	2.1	2.1	2.1	2.1	2.1
OR >3500	4.5	5.7	6.3	6.3	6.3	6.3	6.3	6.3
OR >2000	10.7	14.0	14.6	14.6	14.6	14.6	14.6	14.6
OR >1000	20.5	27.1	28.9	29.2	29.2	29.2	29.5	29.5
OR >600	24.4	35.4	38.1	38.7	38.7	39.0	39.3	39.3
OR >300	26.2	39.0	42.9	43.8	43.8	44.6	44.9	44.9
OR >150	26.5	39.6	43.8	44.9	44.9	45.8	46.1	46.1
OR >0	26.5	39.6	44.6	46.1	46.4	47.6	48.2	49.4
TOTAL	89	193	150	155	156	160	162	166

TOTAL NUMBER OF OBS: 336

PCT FREQ NH <5/8: 50.6

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
21.5	8.8	7.1	7.9	5.9	3.1	3.7	8.2	31.2	2.5	353

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977

MAY

AREA 0028 VALPARAISO
34.55 73.0W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	1.3	.3	.2	.0	.4	.2	.0	.1	.0	1.1	3.7	
	TOT %	1.3	.3	.2	.0	.4	.2	.0	.1	.0	1.1	3.7	
1/2<1	PCP	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2	
	NO PCP	.2	.0	.2	.2	.0	.0	.0	.0	.0	.0	.7	
	TOT %	.2	.2	.2	.2	.0	.0	.0	.0	.0	.0	.9	
1<2	PCP	.7	.0	.4	.0	.2	.1	.0	.0	.0	.0	1.3	
	NO PCP	.2	.1	.2	.2	.4	.2	.0	.0	.0	.0	1.3	
	TOT %	.8	.1	.7	.2	.6	.3	.0	.0	.0	.0	2.6	
2<5	PCP	1.1	.2	.2	.1	.2	.0	.0	.4	.0	.0	2.2	
	NO PCP	.4	.0	.2	.0	.5	.3	.0	.2	.0	.4	2.2	
	TOT %	1.5	.2	.4	.1	.8	.3	.0	.7	.0	.4	4.4	
5<10	PCP	1.4	.3	.2	.2	.0	.0	.0	.8	.0	.0	2.9	
	NO PCP	4.3	2.6	.1	1.7	3.5	1.3	.8	2.9	.0	3.1	20.2	
	TOT %	5.7	2.9	.3	1.9	3.5	1.3	.8	3.7	.0	3.1	23.1	
10+	PCP	.5	.3	.0	.0	.0	.0	.0	.1	.0	.0	.9	
	NO PCP	11.3	4.0	1.9	2.6	23.4	8.0	3.5	4.4	.0	5.3	64.4	
	TOT %	11.8	4.3	1.9	2.6	23.4	8.0	3.5	4.5	.0	5.3	65.3	
TOT OBS													455
TOT PCT													
		21.4	8.0	3.7	5.0	28.7	10.1	4.3	8.9	.0	9.9	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.4	.1	.0	.0	.1	.0	.0	.0	.0	.7	1.5	
	4-10	.2	.2	.1	.0	.3	.0	.1	.0	.0	.0	1.0	
	11-21	.3	.0	.0	.0	.1	.0	.0	.0	.0	.0	.4	
	22+	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	
	TOT %	.9	.4	.1	.0	.6	.1	.1	.1	.0	.7	3.1	
1/2<1	0-3	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	4-10	.0	.1	.2	.1	.0	.0	.0	.0	.0	.0	.4	
	11-21	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	22+	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	TOT %	.4	.2	.2	.1	.0	.0	.0	.0	.0	.0	1.0	
1<2	0-3	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.1	
	4-10	.4	.0	.4	.0	.1	.1	.0	.0	.0	.0	1.3	
	11-21	.3	.1	.0	.1	.3	.0	.0	.0	.0	.0	.9	
	22+	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	TOT %	1.0	.2	.4	.1	.5	.3	.1	.0	.0	.0	2.7	
2<5	0-3	.0	.0	.1	.0	.0	.0	.0	.0	.0	.3	.4	
	4-10	.7	.1	.1	.0	.2	.2	.1	.0	.0	.0	1.6	
	11-21	.7	.2	.0	.1	.4	.1	.0	.3	.0	.0	1.8	
	22+	.7	.1	.0	.0	.0	.0	.1	.3	.0	.0	1.2	
	TOT %	2.1	.4	.3	.2	.6	.3	.2	.6	.0	.3	5.0	
5<10	0-3	.3	.6	.0	.1	.6	.4	.1	.4	.0	2.4	4.9	
	4-10	1.5	.8	.4	1.4	1.4	1.1	.4	1.1	.0	.0	8.2	
	11-21	2.1	.7	.0	.0	1.0	.1	.3	.7	.0	.0	5.0	
	22+	.5	.0	.0	.0	.1	.0	.0	.2	.0	.0	.9	
	TOT %	4.4	2.2	.4	1.6	3.2	1.7	.8	2.5	.0	2.4	19.0	
10+	0-3	.9	.4	.3	.4	1.4	.9	.6	.0	.0	4.6	9.4	
	4-10	6.4	2.0	1.5	2.0	9.8	5.9	2.2	2.2	.0	.0	32.1	
	11-21	4.1	1.8	.0	.4	11.7	3.3	.3	1.6	.0	.0	23.3	
	22+	.6	.2	.1	.0	2.8	.5	.1	.1	.0	.0	4.4	
	TOT %	12.0	4.4	2.0	2.8	25.7	10.6	3.2	4.0	.0	4.6	69.2	
TOT OBS													679
TOT PCT													
		20.8	7.8	3.4	4.9	30.5	13.0	4.5	7.1	.0	8.0	100.0	

MAY

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1855-1977AREA 0028 VALPARAISO
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HRUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00603	5.4	1.4	4.1	9.5	12.2	9.5	1.4	.0	2.7	.0	45.9	54.1	74
06609	3.2	.0	4.2	9.5	15.8	9.5	6.3	1.1	.0	2.1	51.6	48.4	95
12615	3.2	2.1	5.3	10.5	16.8	8.4	5.3	1.1	1.1	.0	53.7	46.3	95
18621	1.2	1.2	8.3	8.3	13.1	4.8	2.4	.0	.0	.0	39.3	60.7	84
TOT	11	4	19	33	51	28	14	2	3	2	167	181	348
PCT	3.2	1.1	5.5	9.5	14.7	8.0	4.0	.6	.9	.6	48.0	52.0	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HRUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00603	4.3	.0	1.4	3.6	18.1	72.5	138
06609	2.5	1.7	2.1	5.0	22.5	66.3	240
12615	3.7	1.9	3.7	9.3	21.0	60.5	162
18621	3.1	1.0	4.6	6.7	18.5	66.2	195
TOT	24	9	22	45	149	486	735
PCT	3.3	1.2	3.0	6.1	20.3	66.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HRUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00603	5.6	12.7	23.9	23.9	52.1	71
06609	3.3	8.9	21.1	35.6	43.3	90
12615	3.2	12.8	27.7	27.7	44.7	94
18621	1.2	14.8	24.7	19.8	55.6	81
TOT	11	41	82	91	163	336
PCT	3.3	12.2	24.4	27.1	48.5	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.2	.0	.0	.2	.4	.7	.0	7	1.5
60/64	.0	.0	.2	.4	.4	2.4	8.5	5.5	80	17.5
55/59	.0	.0	.0	.0	3.5	10.5	23.4	15.1	240	52.5
50/54	.0	.0	.0	.2	.9	4.4	13.8	7.0	120	26.3
45/49	.0	.0	.0	.0	.2	.4	.9	.2	8	1.8
40/44	.0	.0	.0	.0	.0	.0	.4	.0	2	.4
TOTAL	0	1	1	3	24	83	218	127	457	100.0
PCT	.0	.2	.2	.7	5.3	18.2	47.7	27.8		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	.0	.0	.0	.3	.7	.1	.2	.3	.0	.0
60/64	5.2	1.5	.2	.2	5.0	.7	.5	2.8	.0	1.3
55/59	11.9	3.0	3.0	2.6	16.2	5.4	3.0	2.7	.0	4.6
50/54	4.2	4.0	.8	1.9	4.9	3.0	.4	1.2	.0	5.9
45/49	.0	.2	.0	.4	.5	.1	.0	.0	.0	.4
40/44	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4
TOTAL	21.3	8.8	4.0	5.4	27.5	9.3	4.0	7.0	.0	12.7

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HRUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00603	68	64	62	57	51	50	48	56.7	483
06609	66	63	61	56	50	47	49	55.8	1008
12615	68	63	61	56	50	48	41	55.9	480
18621	75	66	64	58	53	50	48	58.3	1050
TOT	75	65	62	57	51	48	41	56.8	3021

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HRUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00603	.0	.9	5.5	17.3	43.6	32.7	85	110
06609	.0	.0	5.9	13.7	52.3	28.1	85	153
12615	.0	.0	4.2	15.3	50.8	29.7	86	118
18621	.0	4.4	5.8	24.1	47.4	18.2	81	137
TOT	0	7	28	91	253	139	84	518

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1859-1977

MAY

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	69 72	73 76	TOT	M FOG	MO FOG
14/16	.0	.0	.0	.0	.2	.0	.0	.0	1	.0	.2
11/13	.0	.0	.0	.0	.0	.2	.0	.0	1	.0	.2
9/10	.0	.0	.0	.2	.0	.0	.0	.0	1	.0	.2
7/8	.0	.0	.0	.7	.5	.2	.0	.0	6	.2	1.2
6	.0	.0	.0	.5	.2	.2	.0	.0	4	.0	1.0
5	.0	.0	.0	1.9	1.2	.2	.0	.0	14	.2	3.2
4	.0	.0	.5	1.9	1.9	.0	.0	.0	18	.0	4.4
3	.0	.0	.5	1.9	1.0	.0	.0	.0	14	.2	3.2
2	.0	.2	1.5	5.1	2.2	.2	.0	.0	38	.7	8.5
1	.0	.2	5.6	7.5	2.7	.0	.0	.0	66	.7	15.3
0	.0	1.0	6.8	8.0	.2	.5	.0	.2	69	1.2	15.5
-1	.0	.7	4.9	6.8	.5	.2	.0	.0	54	1.9	11.2
-2	.5	.5	4.1	2.9	.2	.0	.2	.0	35	.7	7.8
-3	.5	2.4	5.3	1.9	.7	.0	.0	.0	45	1.0	10.0
-4	.0	.7	3.6	1.5	.0	.0	.0	.0	24	1.0	4.9
-5	.2	.5	1.2	1.2	.2	.2	.0	.0	15	.5	3.2
-6	.0	.0	1.5	.2	.0	.0	.0	.0	7	.0	1.7
TOTAL	5	26	146	175	49	9	1	1	412	35	377
PCT	1.2	6.3	35.4	42.5	11.9	2.2	.2	.2	100.0	8.5	91.5

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							PCT	NE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.5	.0	.0	.0	.0	.0	.5	.5	.5	.0	.0	.0	.0	.0	.0	.5
1-2	.4	4.3	1.0	.0	.0	.0	5.7	.0	.0	1.1	1.0	.0	.0	.0	.0	2.1
3-4	.0	3.1	4.9	.5	.0	.0	8.5	.0	.0	.1	1.9	.0	.0	.0	.0	2.0
5-6	.0	.4	4.1	.5	.0	.0	5.0	.0	.0	.1	.1	.5	.0	.0	.0	.8
7	.4	.4	1.4	.0	.0	.4	2.5	.1	.1	.0	.0	.0	.0	.0	.0	.3
8-9	.0	.0	.0	.5	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.5	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.5	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.3	8.2	11.4	2.0	.5	.4	23.7	.6	1.5	3.0	.5	.0	.0	.0	.0	5.7

HGT	E							PCT	SE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.6
1-2	.4	.0	.0	.0	.0	.0	.4	.4	.4	1.1	.0	.0	.0	.0	.0	1.5
3-4	.0	.5	.0	.0	.0	.0	.5	.0	.6	.0	.0	.0	.0	.0	.0	.6
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.4	.5	.0	.0	.0	.0	.9	1.0	1.8	.0	.0	.0	.0	.0	.0	2.8

PERIOD: (OVER-ALL) 1963-1977

MAY

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TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.9	1.5	1.0	.0	.0	.0	3.4	.0	.5	.0	.0	.0	.0	.5
1-2	.8	2.4	2.1	.0	.0	.0	5.3	.0	2.0	.4	.0	.0	.0	2.4
3-4	.0	4.4	5.4	.0	.0	.0	9.8	.0	1.1	.1	.0	.0	.0	1.3
5-6	.0	1.0	5.0	.4	.0	.0	6.4	.0	1.0	.5	.1	.0	.0	1.6
7	.0	1.8	4.0	.3	.0	.0	6.3	.0	1.3	.5	.0	.0	.0	1.8
8-9	.0	.0	.0	.3	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.5	.3	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.4	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.5	.0	.5	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.6	11.1	18.1	2.3	.5	.0	32.5	.0	5.9	1.5	.3	.0	.0	7.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.5	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.8	.0	.0	.0	.0	.8	.1	2.4	1.0	.0	.0	.0	3.5	.0
3-4	.0	.4	.0	.0	.0	.0	.4	.0	1.8	3.3	.0	.0	.0	5.0	.0
5-6	.0	.5	.0	.0	.0	.0	.5	.0	.0	1.3	.0	.0	.0	1.3	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.5	.0	.1	1.3	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.5	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	2.1	.0	.0	.0	.0	2.6	.1	4.1	6.2	1.0	.0	.1	11.6	88.4

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT
<1	17.1	2.0	1.0	.0	.0	.0	20.0	085
1-2	2.0	13.7	5.4	.0	.0	.0	21.0	
3-4	.0	11.7	15.1	.3	.0	.0	27.3	
5-6	.0	2.9	10.7	1.3	.0	.0	15.1	
7	.5	3.9	6.3	1.0	.0	.5	12.2	
8-9	.0	.0	.0	1.5	.0	.0	1.5	
10-11	.0	.0	.3	1.0	.0	.0	1.5	
12	.0	.0	.0	.3	.3	.0	1.0	
13-16	.0	.0	.0	.0	.5	.0	.5	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	19.5	34.1	39.0	5.9	1.0	.5	100.0	205

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	3.5	6.0	7.8	4.3	1.8	.4	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	72
6-7	.0	.7	5.7	9.9	5.3	1.8	2.5	.4	1.1	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	78
8-9	.0	.4	3.5	4.3	2.1	3.2	1.8	1.1	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	50
10-11	.0	.0	1.4	1.1	2.8	2.5	1.8	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	35
12-13	.0	.0	.0	1.1	.0	.0	.0	.0	.7	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6
13-14	.0	.0	.0	.0	.0	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4
INDET	6.0	2.5	1.8	1.8	.0	.4	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	37
TOTAL	27	27	57	63	34	27	22	9	14	2	0	0	0	0	0	0	0	0	0	0	282
PCT	9.6	9.6	20.2	22.3	12.1	9.6	7.8	3.2	5.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0

JUNE

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977

TABLE 1

AREA 0028 VALPARAISO
34.48 73.0W

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGD WD PCPN	FGD WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	13.4	4.5	2.0	.0	.0	.0	.0	18.9	5.8	.0	1.0	.0	1.0	.0	73.3
NE	8.5	1.7	3.4	.0	.0	.0	.0	13.6	.8	.0	3.4	.0	3.4	.0	78.8
E	.0	.0	4.8	.0	.0	.0	.0	4.8	.0	.0	.0	.0	.0	.0	95.2
SE	.0	.0	6.3	.0	.0	.0	.0	6.3	.0	.0	.0	.0	.0	.0	93.7
S	.7	.0	1.6	.0	.0	.0	.0	2.3	.7	.0	2.8	.0	1.9	.0	92.3
SW	.6	7.1	.0	.0	.0	.0	.0	7.7	.6	.0	4.7	.0	2.4	.0	84.6
W	.0	.0	.0	.0	.0	.0	.0	.0	21.7	.0	.0	.0	.0	.0	78.3
NW	13.5	8.3	8.3	.0	.0	.0	.0	26.0	5.2	.0	4.2	.0	.0	.0	64.6
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	4.3	.0	.0	.0	.0	4.3	.0	.0	.0	.0	.0	.0	91.3
TOT PCT	5.2	2.6	2.6	.0	.0	.0	.0	10.0	3.4	.0	2.1	.0	1.3	.0	83.2
TOT OBS:	381														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGD WD PCPN	FGD WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00003	6.5	3.2	1.1	.0	.0	.0	.0	10.8	4.3	.0	1.1	.0	1.1	.0	82.8
06009	3.6	1.8	.9	.0	.0	.0	.0	6.3	3.6	.0	1.8	.0	.0	.0	88.4
12015	5.4	1.1	4.3	.0	.0	.0	.0	9.8	4.3	.0	1.1	.0	4.3	.0	80.4
18021	5.4	4.3	5.4	.0	.0	.0	.0	14.0	1.1	.0	4.3	.0	.0	.0	80.6
TOT PCT	5.1	2.6	2.8	.0	.0	.0	.0	10.0	3.3	.0	2.1	.0	1.3	.0	83.3
TOT OBS:	390														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15
N	2.1	8.0	7.5	4.0	1.6	.2		23.4	15.2		23.2	25.0	21.2	20.9	24.2	18.8
NE	1.4	3.5	1.4	.5	.2	.0		7.1	9.9		5.7	3.6	6.7	7.7	9.7	18.8
E	.7	1.4	.6	.1	.0	.0		2.7	7.6		2.0	.0	2.9	2.7	2.9	12.5
SE	1.3	3.6	2.4	1.1	.1	.0		8.5	11.1		6.7	14.3	9.1	8.8	12.1	9.4
S	2.2	8.5	8.8	1.9	.2	.0		21.6	11.6		24.2	14.3	23.5	23.7	18.1	17.2
SW	1.6	4.6	2.9	.3	.1	.8		9.6	9.5		10.7	28.6	10.7	8.7	8.4	10.9
W	1.0	2.4	2.1	.4	.1	.0		6.0	10.9		8.3	10.7	4.9	5.3	6.0	6.3
NW	1.7	6.5	5.1	1.8	.8	.1		16.0	13.0		15.3	3.6	14.0	15.4	14.7	.0
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0
CALM	5.1							5.1	.0		5.9	.0	7.2	6.8	3.8	6.3
TOT OBS	535	1208	964	314	97	10	3128		11.6		473	7	517	442	451	16
TOT PCT	17.1	38.6	30.8	10.0	3.1	.3		100.0			100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	03	06	12	18
N	5.8	8.3	5.6	3.0	.7	23.4	15.2		23.2	21.1	24.0	25.0	
NE	3.2	2.9	.5	.4	.1	7.1	9.9		5.6	7.1	10.0	6.5	
E	1.5	.9	.3	.0	.0	2.7	7.6		2.0	2.8	3.3	2.8	
SE	3.1	3.1	2.0	.3	.0	8.5	11.1		6.8	9.0	12.0	7.5	
S	5.7	10.6	4.9	.4	.0	21.6	11.6		24.1	23.6	18.1	20.4	
SW	4.0	4.0	1.5	.1	.8	9.6	9.5		10.9	9.8	8.5	9.2	
W	2.0	2.7	1.0	.2	.0	6.0	10.9		8.4	5.1	6.0	6.6	
NW	4.5	7.2	2.6	1.4	.2	16.0	13.0		15.1	14.7	14.2	18.1	
VAR	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	
CALM	5.1					5.1	.0		5.8	7.0	3.9	3.8	
TOT OBS	1093	1242	571	189	33	3128		11.6	480	959	467	1222	
TOT PCT	34.9	39.7	18.3	6.0	1.1		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977

JUNE

AREA 0028 VALPARAISO
34.43 73.0W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)						48+	MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47					
0000Z	5.8	11.0	38.8	21.5	9.6	2.5	.8	11.6	100.0	480	
0600Z	7.0	13.1	39.7	28.8	7.8	3.2	.3	10.8	100.0	959	
1200Z	3.9	13.1	42.0	28.7	9.9	2.6	.0	11.1	100.0	467	
1800Z	3.8	11.1	36.4	33.0	12.0	3.4	.2	12.3	100.0	1222	
TOT	159	376	1208	964	314	97	10	11.6		3128	
PCT	5.1	12.0	38.6	30.8	10.0	3.1	.3		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	1.8	3.8	4.8	18.6		6.6
NE	.9	.7	1.0	4.7		6.4
E	2.1	.4	.8	.0		2.6
SE	2.5	.7	1.3	.9		3.6
S	15.5	4.2	4.3	4.5		3.1
SW	4.5	.5	4.0	1.5		3.6
W	1.1	.4	1.4	1.3		3.2
NW	1.0	.9	1.0	5.0		6.4
VAR	.0	.0	.0	.0		.0
TOT OBS	80	32	49	102	269	4.9
TOT PCT	30.4	12.2	18.6	38.8	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.0	3.6	7.6	7.2	1.0	1.4	.4	.0	.0	7.8	
NE	.8	.0	.6	.7	2.0	1.0	.0	.0	.0	.0	2.3	
E	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.4	
SE	.1	.0	.0	.8	.4	.0	.0	.0	.0	.1	4.0	
S	.7	.0	.4	1.4	2.3	1.7	.0	.4	.0	.3	21.3	
SW	.0	.0	.0	.5	1.1	.2	.8	.0	.0	.0	7.9	
W	.0	.0	.0	.4	1.7	.0	.0	.0	.0	.0	2.2	
NW	.4	.4	.0	.9	3.1	.0	.1	.0	.0	.0	3.0	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT OBS	5	1	12	36	49	10	6	2	0	3	139	269
TOT PCT	1.9	.4	4.6	13.7	18.6	3.6	2.3	.8	.0	1.1	52.9	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)							
	>10	>5	>2	>1	>1/2	>1/4	>90YD	>0
>OR >6500	.7	1.1	1.1	1.1	1.1	1.1	1.1	1.1
>OR >5000	.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
>OR >3500	1.9	3.7	3.7	3.7	4.1	4.1	4.1	4.1
>OR >2000	4.8	7.4	7.4	7.4	7.8	7.8	7.8	7.8
>OR >1000	16.7	25.3	26.4	26.4	26.8	26.8	26.8	26.8
>OR >600	24.9	37.2	40.1	40.1	40.5	40.5	40.5	40.5
>OR >300	25.7	39.8	44.2	44.6	45.0	45.0	45.0	45.0
>OR >150	25.7	39.8	44.2	45.0	45.4	45.4	45.4	45.4
>OR >0	26.0	40.1	45.0	46.1	46.5	46.5	46.8	47.2
TOTAL	70	108	121	124	125	125	126	127

TOTAL NUMBER OF OBS: 269

PCT FREQ NH <5/8: 52.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
	17.0	12.4	9.3	7.8	7.4	4.6	4.6	6.0	29.7	1.1	283

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977

JUNE

AREA 0028 VALPARAISO
34.45 73.0W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3	
	NO PCP	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.0	.3
	TOT %	.0	.3	.0	.0	.3	.0	.0	.3	.0	.0	.3	
1/2<1	PCP	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
1<2	PCP	.3	.0	.0	.1	.2	.0	.0	.3	.0	.0	.8	
	NO PCP	.0	.0	.0	.0	.3	.3	.3	.0	.0	.0	.8	
	TOT %	.3	.0	.0	.1	.5	.3	.3	.3	.0	.0	1.6	
2<5	PCP	2.2	.1	.0	.0	.2	.1	.0	.0	.0	.0	2.6	
	NO PCP	1.0	.1	.0	.0	.2	.1	.3	.3	.0	.3	2.1	
	TOT %	3.2	.2	.0	.0	.4	.1	.3	.3	.0	.3	4.7	
5<10	PCP	2.0	.8	.2	.3	.0	.8	.0	1.1	.0	.0	5.2	
	NO PCP	9.3	1.7	.5	1.0	3.0	.4	.3	.1	.0	1.6	17.8	
	TOT %	11.3	2.5	.7	1.4	3.0	1.2	.3	1.2	.0	1.6	23.1	
10+	PCP	.1	.1	.0	.0	.3	.0	.0	.0	.0	.3	.8	
	NO PCP	10.9	4.7	3.3	4.8	23.6	9.5	3.7	4.3	.0	3.9	68.8	
	TOT %	11.0	4.8	3.3	4.8	23.8	9.5	3.7	4.3	.0	4.2	69.6	
TOT OBS													
TOT PCT													
		26.0	7.7	4.1	6.2	28.0	11.1	4.5	6.3	.0	6.0	100.0	381

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.1	.0	.0	.0	.0	.8	1.0	
	4-10	.1	.4	.0	.0	.8	.1	.0	.2	.0		1.6	
	11-21	.0	.0	.0	.0	.1	.0	.0	.0	.0		.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	
	TOT %	.1	.4	.0	.0	1.1	.1	.0	.2	.0	.8	2.7	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.1	.0	.0	.0	.0	.0	.0	.0	.0		.1	
	11-21	.0	.0	.0	.0	.0	.3	.0	.0	.0		.3	
	22+	.1	.0	.0	.0	.0	.0	.0	.0	.0		.1	
	TOT %	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.6	
1<2	0-3	.0	.0	.0	.0	.0	.1	.0	.0	.0	.3	.4	
	4-10	.3	.1	.0	.0	.1	.0	.0	.0	.0		.6	
	11-21	.6	.0	.0	.0	.1	.0	.2	.2	.0		1.1	
	22+	.3	.0	.0	.0	.1	.0	.0	.0	.0		.4	
	TOT %	1.1	.1	.0	.0	.4	.1	.2	.2	.0	.3	2.5	
2<5	0-3	.0	.0	.0	.0	.1	.0	.0	.1	.0	.4	.7	
	4-10	.6	.1	.0	.1	.5	.2	.0	.2	.0		1.8	
	11-21	.7	.0	.0	.0	.1	.0	.1	.4	.0		1.4	
	22+	1.8	.1	.0	.0	.0	.0	.1	.5	.0		2.5	
	TOT %	3.2	.2	.0	.1	.8	.3	.2	1.3	.0	.4	6.5	
5<10	0-3	.1	.5	.0	.1	.1	.0	.0	.1	.0	1.6	2.5	
	4-10	1.9	1.1	.5	.6	1.6	.5	.5	.2	.0		6.9	
	11-21	3.4	.5	.1	.0	.8	.6	.1	.4	.0		5.8	
	22+	4.2	.7	.0	.0	.0	.3	.2	.8	.0		6.2	
	TOT %	9.6	2.7	.7	.7	2.5	1.3	.8	1.7	.0	1.6	21.5	
10+	0-3	.6	.7	.7	1.3	1.7	1.2	.4	.1	.0	3.0	11.8	
	4-10	3.7	2.3	1.5	2.5	7.6	4.8	1.8	2.9	.0		26.9	
	11-21	5.2	.7	.2	1.2	11.1	2.9	1.5	1.3	.0		24.1	
	22+	.4	.2	.0	.6	1.8	.2	.1	.1	.0		3.4	
	TOT %	9.9	3.8	2.4	5.6	22.2	9.1	3.7	4.4	.0	3.0	66.1	
TOT OBS													
TOT PCT													
		24.2	7.3	3.1	6.4	26.9	11.3	5.0	7.8	.0	8.1	100.0	706

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PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977AREA 0028 VALPARAISO
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8) AND
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	.0	.0	6.2	13.8	20.0	7.7	1.5	.0	.0	1.5	50.8	49.2	65
06009	2.4	.0	2.4	15.3	15.3	2.4	1.2	1.2	.0	1.2	41.2	58.8	85
12015	1.5	.0	4.5	16.4	17.9	3.0	3.0	.0	.0	.0	46.3	53.7	67
18021	3.2	1.6	4.8	6.3	20.6	1.6	3.2	1.6	.0	1.6	44.4	55.6	63
TOT	5	1	12	37	51	10	6	2	0	3	127	153	280
PCT	1.8	.4	4.3	13.2	18.2	3.6	2.1	.7	.0	1.1	43.4	54.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NH) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.7	.7	2.7	6.2	23.3	66.4	146
06009	2.0	.0	2.0	7.7	17.5	70.7	246
12015	2.8	1.4	3.5	7.6	22.9	61.8	144
18021	5.0	.6	2.2	3.9	23.9	64.4	180
TOT	19	4	18	46	153	476	716
PCT	2.7	.6	2.5	6.4	21.4	66.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NH) AND/OR
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	.0	6.3	22.2	30.2	47.6	63
06009	2.4	4.9	20.7	22.0	57.3	82
12015	1.6	7.8	28.1	21.9	50.0	64
18021	3.3	11.7	20.0	28.3	51.7	60
TOT	5	20	61	68	140	269
PCT	1.9	7.4	22.7	25.3	52.0	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
70/74	.0	.0	.0	.0	.0	.3	.0	.0	1	.3
65/69	.0	.0	.0	.0	.0	.3	.3	.0	2	.6
60/64	.0	.0	.0	.0	.3	3.4	4.3	2.5	94	10.5
55/59	.0	.0	.0	.9	3.4	8.6	21.6	18.8	173	33.4
50/54	.0	.0	.0	.6	3.4	6.3	14.8	8.3	109	33.6
45/49	.0	.0	.0	.3	.0	.0	.6	.0	5	1.5
TOTAL	0	0	0	6	23	62	135	98	324	100.0
PCT	.0	.0	.0	1.9	7.1	19.1	41.7	30.2		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
70/74	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
65/69	.0	.0	.3	.0	.3	.0	.0	.0	.0	.0
60/64	2.0	.6	1.0	1.5	1.8	.5	.5	1.7	.0	.9
55/59	18.8	4.4	1.7	2.3	13.8	4.1	2.8	3.9	.0	1.5
50/54	5.4	3.9	.2	1.7	10.3	6.5	1.8	1.0	.0	2.8
45/49	.0	.6	.0	.3	.0	.3	.0	.0	.0	.3
TOTAL	26.2	9.6	3.5	5.9	26.2	11.3	5.0	6.6	.0	5.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	74	61	59	55	50	47	45	55.2	479
06009	70	60	59	55	49	46	40	54.3	963
12015	68	62	60	55	49	45	41	54.6	463
18021	76	64	62	56	51	49	41	56.5	1172
TOT	76	63	60	55	50	46	40	55.3	3077

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	7.8	18.2	41.6	32.5	85	77
06009	.0	1.1	4.6	12.6	46.0	35.6	87	87
12015	.0	1.1	5.7	18.2	50.0	25.0	84	88
18021	.0	6.1	11.0	25.6	29.3	28.0	81	82
TOT	0	7	24	62	140	101	84	334

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(OVER-ALL) 1870-1977

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	TOT	N FOG	NO FOG
9/10	.0	.0	.0	.0	.3	.3	2	.0	.6
7/8	.0	.0	.0	.3	.0	.0	1	.0	.3
6	.0	.0	.3	.0	.0	.0	1	.0	.3
5	.0	.0	.3	.6	.0	.0	3	.0	1.0
4	.0	.0	1.3	.6	1.0	.0	9	.0	2.9
3	.0	.0	.3	2.9	.3	.0	11	.3	3.2
2	.0	.6	2.9	4.8	1.0	.0	29	.0	9.2
1	.0	.6	3.2	7.0	1.6	.0	39	.6	11.8
0	.0	1.3	9.2	5.7	1.0	.0	34	.3	16.9
-1	.0	.6	9.2	4.8	.0	.0	46	.3	14.3
-2	.0	1.3	9.2	2.9	.3	.0	42	.0	13.4
-3	.0	1.0	7.3	1.0	.0	.0	29	.0	9.2
-4	.0	1.0	4.1	1.6	.0	.0	21	.3	6.4
-5	.6	2.2	1.0	.6	.0	.0	14	.3	4.1
-6	.0	1.0	.3	.3	.0	.0	5	.0	1.6
-7/-8	.0	1.3	.6	.0	.0	.0	6	.0	1.9
-9/-10	.0	.0	.6	.0	.0	.0	2	.0	.6
TOTAL	2	157	103	17	1	314	100.0	2.2	97.8
PCT	.6	10.8	50.0	32.8	5.4	.3			

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.5	.6	.0	.0	.0	.0	1.1	.8	.6	.0	.0	.0	.0	1.4
1-2	.0	3.7	.5	.0	.0	.0	4.2	.0	.8	.6	.0	.0	.0	1.4
3-4	.0	1.3	3.5	.0	.0	.0	4.8	.0	1.9	1.6	.0	.0	.0	3.5
5-6	.0	.0	6.9	.6	.0	.0	7.5	.0	.0	.3	.0	.0	.0	.3
7	.0	.0	3.7	.3	.0	.0	4.0	.0	.0	.0	.2	.0	.0	.2
8-9	.0	.0	.6	.6	.6	.0	1.9	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	1.3	1.3	.0	.0	2.6	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.6	.6	.0	1.3	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	2.1	.0	2.1	.0	.0	.0	.0	.5	.0	.5
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	5.6	16.5	3.7	3.4	.0	29.6	.8	3.4	2.6	.2	.5	.0	7.4

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	1.9	.0	.0	.0	.0	1.9	.0	1.9	.0	.0	.0	.0	1.9
3-4	.0	.0	.6	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.6
5-6	.0	.0	.6	.0	.0	.0	.6	.0	.0	.5	.6	.0	.0	1.1
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.6	.2	.0	.0	.0	.8
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.6	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.6	.6	.0	.0	.0	3.2	.6	1.9	1.4	.8	.0	.0	4.8

PERIOD: (OVER-ALL) 1963-1977

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TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	1.9	.0	.0	.0	.0	1.9	.6	.0	.0	.0	.0	.0	.6	.6
1-2	.0	5.1	1.3	.0	.0	.0	7.1	.0	1.4	.0	.0	.0	.0	.0	2.6
3-4	.0	2.7	2.4	.6	.0	.0	5.8	.0	3.0	.2	.0	.0	.0	.0	2.1
5-6	.0	1.3	5.6	.0	.0	.0	6.9	.0	.6	1.6	.0	.0	.0	.0	3.2
7	.0	.0	2.4	.0	.0	.0	2.4	.0	.6	.0	.0	.0	.0	.0	1.3
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.6
10-11	.0	.0	.0	.5	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.6	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.6	11.1	14.1	1.8	.0	.0	27.6	3.2	5.8	3.0	.0	.0	.0	12.0	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.6	.6
1-2	.0	1.9	.0	.0	.0	.0	1.9	.0	1.4	.0	.0	.0	.0	.0	2.6
3-4	.0	.6	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.6	.6	.0	.0	1.3	.0	.6	1.8	.0	.0	.0	.0	2.4
7	.0	.0	.5	.0	.0	.0	.5	.0	.0	1.0	.0	.0	.0	.0	1.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.6
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.6	2.6	1.1	.6	.0	.0	5.0	.6	2.4	4.2	.0	.0	.0	7.2	96.8

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	9.2	3.1	.0	.0	.0	.0	12.3	163
1-2	1.8	19.0	3.1	.0	.0	.0	23.9	
3-4	.6	9.8	7.4	.6	.0	.0	18.4	
5-6	.6	2.5	17.2	1.8	.0	.0	22.1	
7	.0	.6	8.0	.6	.0	.0	9.2	
8-9	.0	.0	4.3	.6	.6	.0	5.5	
10-11	.0	.0	1.8	1.8	.0	.0	3.7	
12	.0	.0	.0	.6	.6	.0	1.2	
13-16	.0	.0	.0	.6	2.5	.0	3.1	
17-19	.0	.6	.0	.0	.0	.0	.6	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	12.3	35.6	41.7	6.7	3.7	.0	100.0	

PERIOD: (OVER-ALL) 1951-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.6	4.0	7.7	7.7	4.5	1.6	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	69	4
6-7	.0	.8	6.1	5.3	6.5	4.9	2.0	2.4	1.6	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	75	7
8-9	.0	.0	1.6	4.0	4.9	2.0	4.0	.4	2.8	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	30	8
10-11	.0	.4	2.4	.4	1.6	.8	1.6	2.0	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	25	8
12-13	.0	.0	.8	.4	.0	.0	.0	.4	2.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	10	10
13-14	.0	.0	.4	1.6	.0	1.2	.4	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	8
14-15	1.2	.0	.4	.4	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	7	4
TOTAL	7	13	48	49	43	26	23	14	20	4	0	0	0	0	0	0	0	0	0	247	7
PCT	2.8	5.3	19.4	19.8	17.4	10.5	9.3	5.7	8.1	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1905-1976
(OVER-ALL) 1870-1976

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TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA						
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA	
N	14.0	.6	3.7	.0	.0	.0	.0	18.2	2.8	2.3	5.7	.0	1.7	.0	69.2	
NE	17.3	.0	1.5	.0	.0	.0	.0	18.8	4.5	.0	5.3	.0	1.5	.0	69.9	
E	3.3	.0	.0	.0	.0	.0	.0	3.3	.0	.0	25.0	.0	.0	.0	71.7	
SE	3.8	.0	.0	.0	.0	.0	.0	3.8	3.8	.0	16.0	.0	.9	.0	75.5	
S	.0	.7	.0	.0	.0	.0	.0	.7	.7	.0	2.8	1.3	.6	.0	93.9	
SW	2.4	.0	2.4	.0	.0	.0	.0	4.8	2.4	.0	4.2	.6	.0	.0	88.0	
W	3.8	.0	.0	.0	.0	.0	.0	3.8	.0	3.8	3.8	.0	3.8	.0	84.0	
NW	9.6	5.8	4.8	.0	.0	.0	.0	20.2	.0	.0	2.9	.0	.0	.0	76.9	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	1.5	.0	1.5	.0	.0	.0	.0	3.1	.0	.0	33.8	.0	.0	.0	63.1	
TOT PCT	5.5	.7	1.5	.0	.0	.0	.0	7.7	1.5	.7	9.6	.4	.9	.0	79.2	
TOT OBS:	456															

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE								OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG BLWG	DUST SNOW	NO SIG WEA
00003	3.8	.0	2.9	.0	.0	.0	.0	6.7	1.0	.0	10.6	.0	1.0	.0	.0	80.8
06009	4.8	1.0	1.6	.0	.0	.0	.0	8.1	2.4	.8	8.9	.0	.0	.0	.0	79.8
12015	7.6	.8	1.7	.0	.0	.0	.0	10.1	.9	1.7	8.4	1.7	1.7	.0	.0	75.6
18021	5.1	.0	.0	.0	.0	.0	.0	5.1	1.7	.0	10.2	.0	.8	.0	.0	82.2
TOT PCT	5.4	.6	1.5	.0	.0	.0	.0	7.5	1.5	.6	9.5	.4	.9	.0	.0	79.6
TOT OBS:	465															

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18	21
N	1.9	7.1	6.5	3.6	.8	.1	20.0	14.5	19.7	8.3	19.4	18.1	18.5	15.0	23.0	19.3	
NE	1.0	2.6	1.3	.4	.2	*	5.5	10.7	4.8	16.7	4.9	6.1	6.7	5.0	5.9	3.6	
E	.8	1.9	.3	*	*	.0	3.0	6.3	2.6	.0	3.4	3.5	3.7	15.0	2.3	2.5	
SE	1.0	4.1	2.4	.8	.1	.0	8.4	10.9	6.5	.0	8.8	10.8	9.7	.0	8.9	5.3	
S	2.3	11.4	10.3	2.1	.4	.0	26.4	11.6	27.7	33.3	28.5	27.1	27.9	27.5	21.9	28.2	
SW	1.2	4.4	2.7	.9	.1	.0	9.3	10.7	12.1	.0	9.7	7.5	7.1	17.5	7.9	12.6	
W	1.3	2.9	1.6	1.2	.3	.0	7.2	12.3	6.6	.0	7.4	6.3	7.5	.0	8.4	6.1	
NW	1.4	4.9	4.9	2.5	.5	.1	14.2	13.9	12.4	.0	11.2	15.0	13.0	.0	16.3	18.0	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	6.1						6.1	.0	7.5	41.7	6.7	5.6	6.0	20.0	5.3	4.3	
TOT OBS	593	1367	1047	404	81	7	3499	11.5	546	12	593	484	535	20	892	417	
TOT PCT	16.9	39.1	29.9	11.5	2.3	.2	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	4.7	7.9	4.8	2.3	.3		20.0	14.5	19.5	18.8	18.4	21.8	
NE	2.3	1.9	.9	.3	.1		5.5	10.7	5.1	5.4	6.6	5.2	
E	2.0	.9	.1	*	.0		3.0	6.3	2.5	3.4	4.1	2.3	
SE	3.0	3.5	1.5	.3	.0		8.4	10.9	6.4	9.7	9.3	7.8	
S	7.3	12.8	5.7	.6	.1		26.4	11.6	27.8	27.9	27.9	23.9	
SW	3.2	4.2	1.5	.4	*		9.3	10.7	11.8	8.7	7.5	9.4	
W	2.8	2.3	1.2	.8	*		7.2	12.3	6.5	6.9	7.2	7.7	
NW	3.8	5.4	3.5	1.3	.2		14.2	13.9	12.1	12.9	12.5	16.9	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	6.1						6.1	.0	8.2	6.2	6.5	5.0	
TOT OBS	1232	1358	674	213	22	3499		11.5	558	1077	555	1309	
TOT PCT	35.2	38.8	19.3	6.1	.6		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1905-1976
(OVER-ALL) 1870-1976

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000	8.2	10.6	40.0	28.7	10.8	1.6	.2	10.8	100.0	558
0600	6.2	11.0	41.8	29.0	10.4	1.7	.0	10.9	100.0	1077
1200	6.5	12.3	38.7	29.7	10.1	2.7	.0	11.0	100.0	555
1800	5.0	10.2	36.6	31.3	13.4	3.0	.5	12.5	100.0	1309
TOT	214	379	1367	1047	404	81	7	11.5		3499
PCT	6.1	10.8	39.1	29.9	11.5	2.3	.2		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8-6	TOTAL	MEAN CLOUD COVER
N	2.3	.6	3.7	10.0		6.4
NE	.8	.6	1.9	4.7		6.5
E	.5	.3	1.3	1.9		6.2
SE	2.9	1.1	1.1	2.1		4.1
S	16.4	3.8	7.6	4.2		3.2
SW	4.1	1.5	1.9	1.5		3.2
W	1.1	.3	2.8	1.7		5.7
NW	.8	.8	1.4	2.5		5.7
VAR	.0	.0	.0	.0		.0
CALM	2.5	.8	1.1	7.5		6.0
TOT OBS	113	35	82	130	360	4.8
TOT PCT	31.4	9.7	22.8	36.1	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
	149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
N	.5	.0	1.0	2.4	3.7	3.0	.6	.0	.1	.3	5.0	
NE	.3	.3	1.0	.5	.8	1.7	.4	.0	.1	.0	2.8	
E	.1	.0	.3	.0	.7	.9	.1	.0	.0	.0	1.8	
SE	.4	.0	.4	.3	1.2	.0	.0	.0	.0	.1	4.8	
S	.6	.0	.1	.7	5.1	.6	.0	.0	.0	.2	24.8	
SW	.0	.0	.3	.3	.8	.6	.0	.1	.1	.0	6.6	
W	.3	.0	.5	.0	1.1	.5	.0	.5	.1	.0	2.9	
NW	.1	.3	.1	.1	1.9	1.0	.0	.0	.0	.0	2.1	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	4.2	.0	.8	.0	1.1	1.7	.0	.0	.0	.3	3.9	
TOT OBS	23	2	16	16	59	36	4	2	2	3	197	360
TOT PCT	6.4	.6	4.4	4.4	16.4	10.0	1.1	.6	.6	.8	54.7	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4
>5000	.8	2.2	2.2	2.2	2.2	2.2	2.2	2.2
>3500	1.6	3.3	3.3	3.3	3.3	3.3	3.3	3.3
>2000	7.4	12.9	13.2	13.2	13.2	13.2	13.2	13.2
>1000	18.1	28.8	29.3	29.6	29.6	29.6	29.6	29.6
>600	20.0	32.6	33.7	34.0	34.0	34.0	34.0	34.0
>300	21.4	34.2	37.8	38.1	38.1	38.1	38.1	38.4
>150	21.4	34.8	38.4	38.6	38.6	38.6	38.6	38.9
>0	21.4	35.1	39.7	40.3	43.3	43.3	43.8	45.2
TOTAL	78	128	145	147	158	158	160	165

TOTAL NUMBER OF OBSI 365

PCT FREQ NH <5/8 54.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
	21.6	13.2	8.7	7.1	3.7	5.8	5.3	4.5	24.5	5.8	380

PERIOD: (PRIMARY) 1905-1976
(OVER-ALL) 1870-1976

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2	
	NO PCP	.2	.0	.2	.1	.1	.1	.0	.1	.0	1.1	1.8	
	TOT %	.2	.2	.2	.1	.1	.1	.0	.1	.0	1.1	2.0	
1/2<1	PCP	.2	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2	
	NO PCP	.0	.0	.1	.3	.2	.0	.2	.0	.0	1.5	2.4	
	TOT %	.2	.0	.1	.3	.2	.0	.2	.1	.0	1.5	2.6	
1<2	PCP	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	
	TOT %	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2	.4	
2<5	PCP	1.0	.5	.0	.2	.0	.2	.0	.0	.0	.0	2.0	
	NO PCP	.6	.3	.2	.3	.1	.2	.0	.0	.0	1.1	2.9	
	TOT %	1.6	.8	.2	.5	.1	.4	.0	.0	.0	1.1	4.9	
5<10	PCP	1.3	.4	.1	.0	.0	.2	.0	.8	.0	.2	3.1	
	NO PCP	5.9	2.1	1.1	1.5	4.2	.7	.9	1.6	.0	2.4	20.4	
	TOT %	7.1	2.6	1.2	1.5	4.2	.9	.9	2.5	.0	2.6	23.5	
10+	PCP	.9	.2	.0	.0	.2	.0	.2	.3	.0	.2	2.0	
	NO PCP	9.1	3.5	1.6	3.4	24.6	7.7	4.5	2.9	.0	7.5	64.7	
	TOT %	10.0	3.7	1.6	3.4	24.8	7.7	4.7	3.1	.0	7.7	66.7	
TOT OBS													456
TOT PCT		19.2	7.3	3.3	5.8	29.4	9.2	5.8	5.7	.0	14.3	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.8	1.1	
	4-10	.1	.0	.1	.*	.1	.1	.1	.3	.0		.8	
	11-21	.0	.0	.0	.0	.1	.1	.0	.0	.0		.1	
	22+	.0	.1	.0	.0	.0	.0	.0	.0	.0		.1	
	TOT %	.4	.1	.1	.*	.1	.1	.1	.3	.0	.8	2.2	
1/2<1	0-3	.0	.0	.1	.1	.1	.0	.0	.0	.0	1.0	1.3	
	4-10	.0	.0	.0	.1	.0	.0	.1	.0	.0		.3	
	11-21	.1	.0	.0	.0	.0	.0	.0	.*	.0		.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.1	.0		.1	
	TOT %	.1	.0	.1	.2	.1	.0	.1	.2	.0	1.0	1.8	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	
	4-10	.0	.0	.0	.1	.0	.1	.0	.0	.0		.3	
	11-21	.1	.0	.0	.0	.0	.0	.0	.0	.0		.1	
	22+	.1	.0	.0	.0	.0	.0	.0	.1	.0		.3	
	TOT %	.3	.0	.0	.1	.0	.1	.0	.1	.0	.1	.8	
2<5	0-3	.3	.0	.0	.0	.1	.2	.0	.0	.0	.8	1.4	
	4-10	.5	.2	.1	.3	.1	.2	.1	.0	.0		1.5	
	11-21	.3	.1	.0	.0	.0	.1	.0	.0	.0		.6	
	22+	.6	.2	.0	.0	.0	.0	.0	.1	.0		1.0	
	TOT %	1.7	.5	.1	.3	.1	.6	.1	.1	.0	.8	4.5	
5<10	0-3	.3	.4	.2	.3	.6	.1	.0	.1	.0	1.9	4.0	
	4-10	1.7	.9	.4	.4	1.1	.5	.7	.3	.0		6.1	
	11-21	2.0	.4	.1	.2	1.2	.2	.0	1.3	.0		5.3	
	22+	2.4	.1	.1	.0	.3	.0	.1	.6	.0		3.6	
	TOT %	6.4	1.9	.8	.9	3.2	.7	.8	2.3	.0	1.9	19.1	
10+	0-3	.4	.0	.3	.4	1.3	.4	.7	.5	.0	6.1	10.0	
	4-10	3.8	2.0	1.8	3.0	11.9	3.6	2.3	2.1	.0		30.5	
	11-21	3.7	1.0	.4	1.0	14.0	4.2	1.1	1.6	.0		27.2	
	22+	.7	.1	.0	.0	2.2	.6	.1	.2	.0		3.9	
	TOT %	8.6	3.2	2.5	4.4	29.4	8.8	4.2	4.4	.0	6.1	71.6	
TOT OBS													718
TOT PCT		17.5	5.7	3.6	6.1	33.1	10.3	5.4	7.5	.0	10.9	100.0	

AD-A064 027

NAVAL WEATHER SERVICE DETACHMENT ASHEVILLE N C F/G 4/2
SUMMARY OF SYNOPTIC METEOROLOGICAL OBSERVATIONS (SSMO), SOUTH A--ETC(U)
FEB 79

F/G 4/2

UNCLASSIFIED

NL

4 OF 6
AD
AO 64 027

AD
AO 64 027

Age	7.2
Sex	Male
Height	160
Weight	60

IFIED

4

OF

6

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A0 64 027



JULY

PERIOD: (PRIMARY) 1905-1976
(OVER-ALL) 1870-1976AREA 0028 VALPARAISO
34.4S 73.1W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 399	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	7.1	1.2	2.4	4.8	11.9	9.5	.0	1.2	.0	.0	38.1	61.9	84
06009	3.8	.0	2.9	5.8	17.3	8.7	.0	.0	.0	2.9	41.3	58.7	104
12015	7.6	1.1	5.4	4.3	23.9	9.8	2.2	.0	2.2	.0	56.5	43.5	92
18021	6.6	.0	6.6	2.2	11.0	11.0	2.2	.0	.0	.0	41.8	58.2	91
TOT	23	2	16	16	60	36	4	3	2	3	165	206	371
PCT	6.2	.5	4.3	4.3	16.2	9.7	1.1	.8	.5	.8	44.5	55.5	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	1.3	2.6	.7	3.9	16.3	75.2	153
06009	2.2	.4	.4	5.2	17.7	74.1	232
12015	2.5	2.5	1.3	3.2	22.3	68.2	197
18021	2.7	2.2	1.1	4.8	21.5	67.7	186
TOT	16	13	6	32	141	520	728
PCT	2.2	1.8	.8	4.4	19.4	71.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	7.3	11.0	15.9	23.2	61.0	82
06009	3.9	6.8	13.6	28.2	58.3	103
12015	7.8	14.4	20.0	37.8	42.2	90
18021	7.8	13.3	16.7	25.6	57.8	90
TOT	24	41	60	105	200	365
PCT	6.6	11.2	16.4	28.8	54.8	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.0	.5	.0	.0	.0	.0	2	.5
60/64	.0	.0	.0	.5	.5	1.5	.5	1.0	16	4.0
55/59	.0	.0	.0	.5	5.0	12.2	11.4	8.7	152	37.7
50/54	.0	.0	.5	.7	5.0	11.9	19.1	14.9	210	52.1
45/49	.0	.0	.0	.2	.0	3.0	1.5	.7	22	5.5
40/44	.0	.0	.0	.0	.0	.0	.2	.0	1	.2
TOTAL	0	0	2	10	42	115	132	102	403	100.0
PCT	.0	.0	.5	2.5	10.4	28.5	22.8	25.3		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.1	.1	.0	.2	.0	.0	.0
.4	.1	.0	.5	1.7	.8	.5	.1	.0	.0
10.9	3.8	.5	1.9	10.4	1.7	1.4	3.4	.0	3.7
8.5	2.4	1.7	3.3	16.6	7.1	3.5	2.3	.0	6.7
.1	.4	.0	.6	1.6	.2	.2	.0	.0	2.2
.2	.1	.0	.0	.0	.0	.0	.0	.0	.0
20.1	6.6	2.2	6.5	30.3	9.9	5.9	5.8	.0	12.7

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	65	61	59	54	49	46	43	53.9	553
06009	62	60	58	54	48	45	41	53.3	1072
12015	67	61	58	54	47	45	42	53.2	550
18021	71	64	61	55	50	48	43	55.6	1252
TOT	71	62	60	54	49	46	41	54.2	3428

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.0	14.4	23.7	33.0	27.8	82	97
06009	.0	1.8	10.0	24.5	40.0	23.6	82	110
12015	.0	1.9	5.7	33.0	29.2	30.2	83	106
18021	.0	7.0	12.0	43	31.0	18.0	80	100
TOT	0	12	43	117	138	103	82	413

PERIOD: (PRIMARY) 1905-1976
(OVER-ALL) 1870-1976

JULY

TABLE 17

AREA 0028 VALPARAISO
34.45 73.1W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41 44	45 48	49 52	53 56	57 60	61 64	65 68	TOT	W FOG	NO FOG
14/16	.0	.0	.0	.0	.0	.0	.3	1	.0	.3
11/13	.0	.0	.0	.0	.0	.3	.3	2	.0	.5
9/10	.0	.0	.0	.0	.0	.3	.3	2	.0	.5
6	.0	.0	.0	.0	.0	.3	.0	1	.0	.3
5	.0	.0	.0	.0	.8	.5	.0	5	.0	1.4
4	.0	.0	.0	1.1	1.4	.3	.0	10	.3	2.4
3	.0	.0	.0	.8	1.9	.0	.0	10	.0	2.7
2	.0	.0	.0	4.6	1.4	.3	.0	23	.0	6.2
1	.0	.0	.5	5.9	3.8	.0	.0	38	.0	10.3
0	.0	.0	1.6	10.3	2.2	.0	.0	52	.8	13.2
-1	.0	.0	2.2	9.5	1.1	.5	.3	50	.8	12.7
-2	.0	.0	3.0	8.6	.8	.0	.0	46	.5	11.9
-3	.0	.3	3.2	6.2	.0	.0	.0	36	.8	8.9
-4	.0	.8	4.3	5.1	.3	.0	.0	39	.3	10.3
-5	.0	.3	3.2	1.9	.0	.3	.0	21	.3	5.4
-6	.0	.8	2.7	.8	.3	.0	.0	17	.5	4.1
-7/-8	.3	.5	1.9	.5	.0	.0	.0	12	.5	2.7
-9/-10	.0	.3	.0	.5	.0	.0	.0	3	.3	.5
-11/-13	.0	.3	.0	.3	.0	.0	.0	2	.0	.5
TOTAL	1		84		51		4	370	20	350
PCT	.3	3.2	22.7	56.2	13.8	2.7	1.1	100.0	5.4	94.6

PERIOD: (OVER-ALL) 1963-1976

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							NE							PCT
	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	
<1	.0	1.1	.0	.0	.0	.0	1.1	.0	.3	.0	.0	.0	.0	.3	
1-2	.0	5.2	.5	.0	.0	.0	5.7	.0	2.0	.0	.0	.0	.0	2.0	
3-4	.6	1.7	1.5	.0	.0	.0	3.9	.0	.6	.9	.0	.0	.0	1.5	
5-6	.0	.0	2.3	.0	.0	.0	2.3	.0	.0	1.4	.0	.0	.0	1.4	
7	.0	.0	.6	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	1.2	.6	.0	.0	1.9	.0	.0	.0	.0	.6	.0	.6	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	1.2	.0	.0	1.2	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.6	8.0	6.2	1.9	.0	.0	16.7	.0	2.9	2.3	.0	.6	.0	5.9	

HGT	E							SE							PCT
	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	
<1	.0	.5	.0	.0	.0	.0	.5	.6	.6	.0	.0	.0	.0	1.2	
1-2	.0	.0	.5	.0	.0	.0	.5	.0	.6	.2	.0	.0	.0	.8	
3-4	.0	.5	.0	.0	.0	.0	.5	.0	.6	.9	.0	.0	.0	1.5	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.6	.9	.0	.0	.0	1.5	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	.9	.5	.0	.0	.0	1.4	.6	2.3	2.0	.0	.0	.0	5.1	

PERIOD: (OVER-ALL) 1963-1976

JULY

AREA 0028 VALPARAISO
34.4S 73.1W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	2.8	.0	.0	.0	.0	2.8	.0	.0	.0	.0	.0	.0	.0
1-2	.0	5.9	1.7	.0	.0	.0	8.2	.0	2.8	2.0	.0	.0	.0	4.8
3-4	.0	6.3	9.7	1.1	.0	.0	17.1	.0	1.2	4.8	.2	.0	.0	6.2
5-6	.0	.0	6.8	.9	.0	.0	7.7	.0	.0	2.5	.3	.0	.0	2.8
7	.0	.0	.6	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	1.1	.0	.0	.0	1.1	.0	.0	.2	.0	.0	.0	.2
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.6	15.0	19.9	2.0	.0	.0	37.5	.0	4.5	9.4	.5	.0	.0	14.4

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	1.1	.0	.0	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.6	2.9	.0	.0	.0	.0	3.5	.6	2.2	.2	.0	.0	.0	2.9	.0
3-4	.0	1.7	.0	.0	.0	.0	1.7	.0	.9	1.9	.0	.0	.0	2.8	.0
5-6	.0	.0	1.5	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.6	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.6	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.6	5.7	1.5	.0	.0	.0	7.9	.6	3.7	2.6	.0	.0	.0	6.9	95.7

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	6.1	6.7	.0	.0	.0	.0	12.8	
1-2	1.8	21.3	4.9	.0	.0	.0	28.0	
3-4	.6	13.4	19.5	1.2	.0	.0	34.8	
5-6	.0	.6	15.2	1.2	.0	.0	17.1	
7	.0	.6	1.2	.0	.0	.0	1.8	
8-9	.0	.0	3.0	.6	.6	.0	4.3	
10-11	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	1.2	.0	.0	1.2	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	8.5	42.7	43.9	4.3	.6	.0	100.0	164

PERIOD: (OVER-ALL) 1951-1976

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.3	6.1	9.2	5.4	2.2	1.3	.0	.3	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	80	4
6-7	.0	.3	9.6	10.8	3.5	3.5	2.2	.3	.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	98	6
8-9	.0	.3	1.6	1.3	2.9	2.5	2.9	1.6	.6	.6	.6	.0	.0	.0	.0	.0	.0	.0	.0	47	9
10-11	.0	.6	.0	1.3	1.0	1.6	.3	.6	.0	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	20	9
12-13	.0	.0	1.0	1.0	.6	.3	.0	1.0	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	8
>13	.0	.0	.0	1.9	.6	1.3	.6	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	17	8
INDEX	3.8	1.3	1.6	.3	1.0	.6	1.3	1.3	.3	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	37	5
TOTAL	13	27	72	69	37	35	23	18	8	8	4	0	0	0	0	0	0	0	0	314	6
PCT	4.1	8.6	22.9	22.0	11.8	11.1	7.3	5.7	2.5	2.5	1.3	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1867-1977

AUGUST

AREA 0028 VALPARAISO
34.4S 73.1W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SNOW	NO SIG WEA
N	16.1	2.2	3.3	.0	.0	.0	.0	21.7	6.1	.0	6.7	.0	2.2	.0	63.3
NE	5.6	.0	11.1	.0	.0	.0	.0	16.7	2.8	.0	11.1	.0	22.2	.0	47.2
E	5.5	.0	.0	.0	.0	.0	.0	5.5	.0	.0	.0	.0	43.6	.0	50.9
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.7	.0	97.3
S	.7	.0	1.3	.0	.0	.0	.0	2.0	.7	.0	2.7	.0	.0	.0	94.6
SW	.0	.0	.5	.0	.0	.0	.0	.5	1.8	.0	4.1	.0	4.1	.0	89.5
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.4	.0	3.4	.0	93.2
NW	4.5	.0	4.5	.0	.0	.0	.0	9.0	9.0	.0	3.8	.0	1.5	.0	76.7
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	33.3	.0	.0	.0	66.7
TOT PCT	3.2	.3	1.7	.0	.0	.0	.0	5.2	2.3	.0	4.6	.0	3.7	.0	84.1
TOT OBS:	347														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	WD PCPN	WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00603	3.8	.0	1.3	.0	.0	.0	.0	5.0	2.5	.0	5.0	.0	1.3	.0	86.3
06009	3.6	.9	2.7	.0	.0	.0	.0	7.2	.9	.0	4.5	.0	.0	.0	87.4
12015	5.7	.0	1.1	.0	.0	.0	.0	6.9	3.4	.0	4.6	.0	5.7	.0	79.3
18021	1.2	.0	2.4	.0	.0	.0	.0	3.6	2.4	.0	3.6	.0	8.4	.0	81.9
TOT PCT TOT OBS:	3.6 361	.3	1.9	.0	.0	.0	.0	5.8	2.2	.0	4.4	.0	3.6	.0	83.9

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	1.2	6.2	4.7	2.2	.4	.0		14.7	13.1		15.3	18.2	12.5	12.4	13.8	9.5	16.8	16.3
NE	.9	1.6	.6	.5	.1	.0		3.5	9.6		1.9	.0	3.0	2.5	5.6	23.8	4.3	1.8
E	.7	1.1	.2	*	.0	.0		2.0	6.1		1.2	.0	1.8	2.0	2.5	7.1	2.4	1.3
SE	.7	3.9	3.3	1.5	.1	.0		9.7	13.1		6.5	22.7	8.6	11.2	13.3	2.4	10.0	7.8
S	2.3	12.7	13.2	3.5	.4	.0		32.1	12.5		36.0	45.5	36.9	37.3	33.7	9.5	24.9	28.8
SW	1.4	7.0	4.6	1.0	.2	.0		14.2	11.0		15.7	4.5	14.2	11.2	10.3	28.6	14.4	20.2
W	1.1	3.4	2.1	.6	.2	*		7.4	11.1		7.8	.0	6.1	6.0	6.2	.0	8.5	10.3
NW	1.3	5.6	3.9	1.2	.5	*		12.6	12.2		9.4	9.1	11.3	13.2	12.3	9.5	15.5	11.5
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	3.9							3.9	.0		6.2	.0	5.5	4.1	2.1	9.5	3.3	1.8
TOT OBS	404	1748	978	313	59	2	3004		11.6		453	11	493	416	469	21	800	341
TOT PCT	13.4	41.5	32.6	10.4	2.0	.1		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
		7-16	17-27	28-40	00 03					06 09	12 15	18 21		
N	4.0	6.0	3.4	1.1	.2		14.7	13.1	15.4	12.5	13.6	16.6		
NE	1.8	1.1	.3	.2	*		3.5	9.6	1.8	2.8	6.4	3.5		
E	1.3	.6	.1	.0	.0		2.0	6.1	1.2	.0	2.7	2.1		
SE	2.2	4.4	2.4	.6	*		9.7	13.1	6.9	9.8	12.9	9.3		
S	7.5	15.3	8.0	1.2	*		32.1	12.5	36.2	37.1	32.7	26.1		
SW	4.1	7.5	2.0	.5	.1		14.2	11.0	15.4	12.8	11.1	16.1		
W	2.8	2.9	1.2	.4	.1		7.4	11.1	7.7	6.1	6.0	9.0		
NW	3.7	5.7	2.2	.8	.2		12.6	12.2	9.4	12.2	12.2	14.3		
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		
CALM	3.9						3.9	.0	6.0	4.8	2.4	2.8		
TOT OBS	944	1307	389	145	19	3004		11.6	484	909	490	1141		
TOT PCT	31.4	43.5	19.6	4.8	.6		100.0		100.0	100.0	100.0	100.0		

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1807-1977

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34.4S 73.1W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
00003	6.0	9.1	40.7	32.5	10.1	1.5	.0	11.2	100.0	464
06009	4.8	10.0	43.0	31.7	8.7	1.7	.1	10.9	100.0	909
12015	2.4	11.0	45.1	28.6	10.8	1.8	.2	11.5	100.0	490
18021	2.8	8.9	39.2	35.0	11.7	2.5	.0	12.2	100.0	1141
TOT	116	288	1248	978	313	59	2	11.6		3004
PCT	3.9	9.6	41.5	32.6	10.4	2.0	.1	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	1.7	.8	3.4	5.4		6.1
NE	.2	.8	.9	1.0		5.8
E	.0	.4	.7	2.9		7.2
SE	2.6	.4	1.0	1.6		3.8
S	18.6	4.8	9.4	6.3		3.5
SW	6.4	2.1	3.3	3.7		3.8
W	1.7	1.5	1.0	2.7		4.8
NW	2.1	1.5	3.4	4.0		5.6
VAR	.0	.0	.0	.0		.0
CALM	1.5	1.1	.4	.8		3.6
TOT OBS	91	35	61	74	261	4.4
TOT PCT	34.9	13.4	23.4	28.4	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 399	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.4	.0	.4	.7	3.6	2.3	.0	.2	.0	.4	3.4	
NE	.0	.0	.0	.1	.8	.0	.0	.0	.0	.8	1.1	
E	.0	.0	.0	.4	.3	.6	.4	.0	.4	1.3	.6	
SE	.0	.0	.0	.8	.2	.2	.0	.0	.0	.8	3.6	
S	.7	.0	.4	1.9	6.3	1.6	.0	.4	.4	.0	27.2	
SW	.5	.0	.0	.8	3.0	.9	.0	.0	.0	.0	10.4	
W	.3	.0	.0	.0	2.3	.4	.0	.0	.0	.4	3.5	
NW	.1	.0	.0	1.1	3.8	1.1	.0	.2	.0	.6	4.1	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.4	.4	.0	.0	.0	.0	.4	2.7	
TOT OBS	5	0	2	16	54	19	1	2	2	12	148	261
TOT PCT	1.9	.0	.8	6.1	20.7	7.3	.4	.8	.8	4.6	56.7	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >90YD	= OR >0
= OR >6500	.8	4.9	5.3	5.3	5.3	5.3	5.3	5.3
= OR >5000	1.5	5.7	6.1	6.1	6.1	6.1	6.1	6.1
= OR >3500	1.5	6.1	6.4	6.4	6.4	6.4	6.4	6.4
= OR >2000	6.4	12.9	13.3	13.6	13.6	13.6	13.6	13.6
= OR >1000	18.6	31.1	33.7	34.1	34.1	34.1	34.1	34.1
= OR >600	22.3	36.7	40.2	40.5	40.5	40.9	40.9	40.9
= OR >300	22.3	37.5	40.9	41.3	41.3	41.7	41.7	41.7
= OR >150	22.3	37.5	40.9	41.3	41.3	41.7	41.7	41.7
= OR >0	22.3	37.5	42.0	42.4	42.4	42.8	43.2	43.6
TOTAL	59	99	111	112	112	113	114	115

TOTAL NUMBER OF OBS: 264

PCT FREQ NH <5/8: 56.4

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
22.4	10.8	9.4	7.6	5.4	3.6	7.6	9.0	22.7	1.4	277

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1867-1977

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34.45 73.1W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.3	.0	.0	.5	.4	.0	.0	.0	.0	1.2	2.3
	TOT %	.0	.3	.0	.0	.5	.4	.0	.0	.0	.0	1.2	2.3
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1<2	PCP	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
	NO PCP	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
	TOT %	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6
2<5	PCP	1.2	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	1.4
	NO PCP	.8	.1	.1	.1	.6	.3	.5	.4	.0	.0	.0	2.9
	TOT %	2.0	.1	.1	.1	.6	.3	.5	.5	.0	.0	.0	4.3
5<10	PCP	1.3	.1	.2	.0	.2	.1	.0	.7	.0	.0	.0	2.6
	NO PCP	3.6	.6	2.2	1.3	3.5	3.1	1.7	2.7	.0	.0	.6	19.3
	TOT %	4.9	.7	2.4	1.3	3.7	3.2	1.7	3.5	.0	.0	.6	21.9
10+	PCP	.0	.3	.0	.0	.6	.0	.0	.0	.0	.0	.0	.9
	NO PCP	5.6	1.0	1.4	3.9	34.7	12.0	4.1	5.6	.0	1.7	70.0	
	TOT %	5.6	1.3	1.4	3.9	35.2	12.0	4.1	5.6	.0	1.7	70.9	
TOT OBS													347
TOT PCT		13.0	2.6	4.0	5.3	40.0	15.8	6.3	9.6	.0	3.5	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.2	.0	.0	.0	.0	.0	.0	.0	1.0	1.2	
	4-10	.0	.0	.0	.1	.2	.2	.0	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.2	.0	.1	.4	.2	.0	.0	.0	1.0	1.9	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.2	
	11-21	.6	.1	.0	.0	.0	.0	.0	.0	.0	.0	.7	
	22+	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	
	TOT %	.9	.2	.0	.0	.0	.0	.0	.0	.0	.0	1.0	
2<5	0-3	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.3	
	4-10	.6	.0	.1	.1	.3	.2	.3	.1	.0	.0	1.7	
	11-21	1.0	.1	.0	.0	.2	.0	.2	.6	.0	.0	2.1	
	22+	.8	.1	.0	.0	.0	.0	.0	.0	.0	.0	.9	
	TOT %	2.4	.2	.1	.1	.7	.2	.3	.9	.0	.0	5.0	
5<10	0-3	.2	.0	.7	.6	.3	.7	.2	.2	.0	1.0	3.8	
	4-10	2.7	.7	1.0	.3	1.8	1.6	1.1	1.2	.0	.0	10.2	
	11-21	2.2	.1	.0	.0	1.0	.7	.2	1.0	.0	.0	5.2	
	22+	.3	.0	.0	.0	.5	.3	.2	.3	.0	.0	1.7	
	TOT %	5.4	.8	1.7	.9	3.6	3.3	1.6	2.7	.0	1.0	21.0	
10+	0-3	.5	.3	.3	.7	1.6	1.2	.6	.5	.0	3.6	9.4	
	4-10	3.5	1.0	.7	1.6	13.8	6.5	1.9	3.6	.0	.0	32.5	
	11-21	2.5	.4	.0	.5	13.8	4.3	1.5	1.0	.0	.0	24.1	
	22+	.0	.0	.0	.3	3.1	.8	.3	.3	.0	.0	4.9	
	TOT %	6.5	1.7	1.0	3.0	32.3	12.8	4.4	5.5	.0	3.6	70.8	
TOT OBS													576
TOT PCT		15.4	3.0	2.7	4.0	37.0	16.5	6.5	9.1	.0	5.7	100.0	

AUGUST

PERIOD: (PRIMARY) 1907=1977
(OVER-ALL) 1867=1977AREA 0028 VALPARAISO
34.45 73.1W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8) AND
OCCURRENCE OF NH <3/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY MGT	TOTAL OBS
00003	.0	.0	.0	5.2	15.5	6.9	.0	1.7	.0	6.9	36.2	63.8	58
06009	3.8	.0	.0	3.8	19.2	10.3	.0	.0	.0	2.6	39.7	60.3	78
12015	1.4	.0	2.8	2.8	26.8	5.6	.0	1.4	1.4	4.2	46.5	53.5	71
18021	1.6	.0	.0	16.1	17.7	4.8	1.6	.0	1.6	4.8	48.4	51.6	62
TOT	5	0	2	18	54	19	1	2	2	12	115	154	269
PCT	1.9	.0	.7	6.7	20.1	7.1	.4	.7	.7	4.5	42.8	57.2	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NH) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	1.6	.8	.8	3.9	18.9	74.0	127
06009	2.0	.0	.0	7.0	20.1	70.9	199
12015	2.4	.0	3.2	4.0	23.8	66.7	126
18021	2.1	.0	1.4	5.7	22.9	67.9	140
TOT	12	1	7	32	126	414	592
PCT	2.0	.2	1.2	5.4	21.3	69.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NH) AND/OR
CEILING HGT (FEET, NH >4/8) BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	.0	1.8	9.1	29.1	61.8	55
06009	3.9	5.2	10.4	31.2	58.4	77
12015	1.4	5.6	16.9	33.8	49.3	71
18021	1.6	3.3	21.3	29.5	49.2	61
TOT	5	11	38	82	144	264
PCT	1.9	4.2	14.4	31.1	54.5	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.0	.0	.3	.0	.3	.0	2	.6
60/64	.0	.0	.3	.3	.6	1.0	.6	.0	9	2.9
55/59	.0	.0	.6	2.9	10.2	14.7	5.8	.0	107	34.2
50/54	.0	.0	1.3	4.8	10.5	26.2	14.1	.0	178	56.9
45/49	.0	.0	.3	.3	1.9	1.9	1.0	.0	17	5.4
TOTAL	0	0	1	8	28	74	137	65	313	100.0
PCT	.0	.0	.3	2.6	8.9	23.6	43.8	20.8		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.1	.6	.0	.0	.0	.0	.0
.3	.0	.0	.2	1.6	.8	.0	.0	.0	.0
7.3	1.2	1.1	2.1	10.5	4.0	2.6	3.2	.0	2.2
5.6	1.8	1.2	1.8	24.8	10.1	3.8	5.7	.0	2.2
.0	.3	.0	.7	2.8	1.0	.6	.0	.0	.0
13.2	3.3	2.3	4.9	40.2	15.8	7.0	8.9	.0	4.5

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	66	60	58	53	49	46	46	53.4	458
06009	66	58	57	53	48	46	49	52.3	913
12015	62	59	57	53	47	44	41	52.6	481
18021	67	63	60	55	50	48	45	55.2	1050
TOT	67	62	59	54	48	46	41	53.6	2902

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	5.6	8.5	12.7	52.1	21.1	83	71
06009	.0	1.0	8.3	31.3	38.5	20.8	82	96
12015	.0	.0	6.5	15.2	47.8	30.4	85	92
18021	.0	5.2	10.4	29.9	42.9	11.7	80	77
TOT	0	9	28	76	151	72	83	336

AUGUST

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1867-1977

TABLE 17

AREA 0028 VALPARAISO
34.45 73.1WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	TOT	W FOG	NO FOG
11/13	.0	.0	.0	.0	.6	.3	3	.0	1.0
9/10	.0	.0	.3	.0	.3	.3	3	.0	1.0
7/8	.0	.0	.0	.6	.6	.0	4	.0	1.3
6	.0	.0	.3	1.3	.3	.0	6	.0	1.9
5	.0	.0	.3	1.3	.0	.0	5	.0	1.6
4	.0	.0	1.0	2.5	.3	.0	12	.6	3.2
3	.0	.0	1.6	5.7	.0	.0	23	.3	7.0
2	.0	.3	5.4	2.2	.0	.0	25	.6	7.3
1	.0	.0	6.3	1.0	.0	.0	23	.3	7.0
0	.0	1.9	13.3	2.2	.0	.0	55	1.6	15.9
-1	.3	4.8	9.2	.0	.0	.0	45	1.0	13.3
-2	.0	5.1	6.7	.0	.0	.0	37	.6	11.1
-3	.3	6.3	3.2	.0	.0	.0	31	.0	9.8
-4	.0	4.1	1.6	.0	.0	.0	18	.0	5.7
-5	1.9	2.5	.6	.0	.0	.0	16	.0	5.1
-6	.6	1.0	.6	.0	.0	.0	7	.0	2.2
-7/-8	.0	.3	.0	.0	.0	.0	1	.0	.3
-14/-16	.0	.3	.0	.0	.0	.0	1	.0	.3
TOTAL	10		159		7		315	16	299
PCT	3.2	26.7	50.5	16.8	2.2	.6	100.0	5.1	94.9

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.8	.0	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0
1-2	.0	2.2	1.6	.0	.0	.0	3.8	1.6	.0	.0	.0	.0	.0	1.6
3-4	.0	2.0	3.8	.0	.0	.0	5.8	.0	.2	.0	.0	.0	.0	.2
5-6	.0	.0	1.4	.8	.0	.0	2.2	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.6	.8	.0	.0	1.4	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.6	2.6	.0	.0	3.2	.0	.0	.0	.0	.0	.0	.6
10-11	.0	.0	.8	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	5.0	8.7	4.2	.0	.0	17.9	1.6	.2	.0	.6	.0	.0	2.4

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.8	.6	.0	.0	.0	.0	1.4	.0	.4	.0	.0	.0	.0	.4
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.2
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.2
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.8
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.8	.6	.0	.0	.0	.0	1.4	.0	.8	.0	1.2	.0	.0	2.0

PERIOD: (OVER-ALL) 1963-1977

AUGUST

AREA 0028 VALPARAISO
34.45 73.1W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	1.8	.0	.0	.0	.0	1.8	.0	1.2	.0	.0	.0	.0	1.2
1-2	.0	9.7	3.8	.0	.0	.0	13.5	.0	2.0	1.8	.0	.0	.0	3.8
3-4	.0	2.2	6.1	.6	.0	.0	9.1	.0	1.0	.8	.0	.0	.0	1.8
5-6	.0	1.4	10.3	2.4	.0	.0	14.1	.0	1.8	.8	.0	.0	.0	4.2
7	.0	.8	.8	3.8	.0	.0	5.4	.0	.0	.0	1.6	.0	.0	1.6
8-9	.0	.6	.0	2.4	.8	.0	3.8	.0	.2	.8	.0	.0	.0	1.0
10-11	.0	.0	.8	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	16.5	22.0	9.1	.8	.0	48.4	.8	6.2	4.2	2.4	.0	.0	13.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.8	.0	.0	.0	.0	.0	.8	.8	.0	.0	.0	.0	.0	.8	
1-2	.0	.6	.0	.0	.0	.0	.6	.0	1.8	.8	.0	.0	.0	2.6	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.4	
5-6	.0	.0	.8	.8	.0	.0	1.6	.0	.8	1.0	.8	.0	.0	2.6	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.8	.0	.0	1.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.6	.0	.0	.0	.6	.0	.0	.2	.0	.0	.0	.2	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.8	.6	1.4	.8	.0	.0	3.6	.8	2.8	2.6	1.6	.0	.0	7.7	96.8

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	5.5	4.7	.0	.0	.0	.0	10.2	
1-2	2.4	16.5	7.9	.0	.0	.0	26.8	
3-4	.0	3.5	11.0	.8	.0	.0	17.3	
5-6	.8	3.9	14.2	5.5	.0	.0	24.4	
7	.0	.8	1.6	6.3	.0	.0	8.7	
8-9	.0	.8	1.6	7.1	.8	.0	10.2	
10-11	.0	.0	1.6	.0	.0	.0	1.6	
12	.0	.0	.8	.0	.0	.0	.8	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	8.7	32.3	38.6	19.7	.8	.0	100.0	127

PERIOD: (OVER-ALL) 1951-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.8	5.9	10.2	5.9	1.3	1.3	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	61	4
6-7	.0	.0	3.0	8.9	3.8	1.7	2.5	.0	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	49	6
8-9	.0	.8	.8	2.5	2.5	7.2	1.7	3.4	2.1	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	52	9
10-11	.0	.4	.0	.8	3.0	2.1	2.1	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	22	8
12-13	.0	.0	.0	1.3	1.7	1.3	.4	.8	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	8
13-14	.0	.0	.0	.8	.0	.4	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	8
INDET	9.3	1.3	1.7	.4	.4	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	34	2
TOTAL	24	20	37	49	30	36	17	11	9	3	0	0	0	0	0	0	0	0	0	236	6
PCT	10.2	8.5	15.7	20.8	12.7	15.3	7.2	4.7	3.8	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

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TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	2.8	.0	5.6	.0	.0	.0	.0	8.3	3.7	.0	9.3	.0	.0	.0	78.7
NE	2.2	.0	1.1	.0	.0	.0	.0	3.3	4.4	.0	20.0	.0	.0	.0	72.2
E	10.0	.0	.0	.0	.0	.0	.0	10.0	.0	.0	26.7	.0	.0	.0	63.3
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.2	.0	.0	.0	91.8
S	.0	.4	.5	.0	.0	.0	.0	.9	.4	.0	3.0	.0	.9	.0	94.9
SW	.0	.2	.0	.0	.0	.0	.0	.2	.2	.0	3.0	1.0	.2	.0	93.3
W	.0	6.8	.0	.0	.0	.0	.0	6.8	.0	.0	6.8	.0	.0	.0	86.4
NW	4.3	.0	9.6	.0	.0	.0	.0	13.8	4.3	.0	4.3	.0	.0	.0	77.7
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.1	.0	.0	.0	90.9
TOT PCT	.7	.5	1.2	.0	.0	.0	.0	2.4	1.0	.0	5.2	.2	.5	.0	90.7
TOT DBS:	420														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00603	2.0	.0	.0	.0	.0	.0	.0	2.0	1.0	.0	3.1	.0	.0	.0	93.9
06609	.8	.0	.8	.0	.0	.0	.0	1.5	3.8	.0	6.1	.0	.0	.0	88.6
12615	.0	.0	3.1	.0	.0	.0	.0	3.1	.0	.0	9.2	.0	.0	.0	87.8
18621	.0	1.9	.9	.0	.0	.0	.0	2.8	.0	.0	8.3	.9	1.9	.0	86.1
TOT PCT	.7	.5	1.1	.0	.0	.0	.0	2.3	1.4	.0	6.7	.2	.5	.0	89.0
TOT DBS:	436														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL DBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	1.7	5.4	2.8	.6	.1	*		10.7	9.8		11.4	20.0	8.5	8.8	10.6	7.7	12.9	10.1
NE	1.1	1.8	.7	.1	.0	.0		3.6	7.0		3.4	.0	3.0	3.1	4.5	7.7	4.3	2.4
E	.5	1.0	.3	.0	.0	.0		1.8	6.5		1.2	.0	1.4	1.6	2.7	.0	2.1	1.5
SE	.8	2.9	3.9	1.6	.3	.1		9.5	14.7		6.7	.0	8.1	12.2	11.6	15.4	8.4	12.2
S	2.5	13.2	16.0	4.2	.4	.0		36.2	12.9		37.5	55.0	40.9	37.1	38.2	7.7	32.9	32.4
SW	2.2	8.3	5.4	.7	.1	.0		16.6	9.9		20.0	5.0	18.2	13.5	14.6	46.2	15.2	18.7
W	1.3	3.1	1.6	.6	.1	*		6.8	10.1		7.0	.0	4.7	8.8	3.7	7.7	8.5	7.2
NW	1.8	4.7	2.1	.8	.3	*		9.6	10.5		7.5	20.0	9.1	7.8	8.1	7.7	12.1	11.6
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	5.2							5.2	.0		5.3	.0	6.2	7.0	6.0	.0	3.7	3.8
TOT DBS	525	1243	1004	262	37	5	3076		10.8		469	5	516	413	480	13	841	339
TOT PCT	17.1	40.4	32.6	8.5	1.2	.2		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL DBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	06	12	18
N	4.5	4.4	1.5	.3	*		10.7	9.8	11.4	8.6	10.5	12.1
NE	2.2	1.2	.2	*	.0		3.6	7.0	3.4	3.0	4.6	3.7
E	1.2	.5	.1	.0	.0		1.8	6.5	1.2	1.5	2.6	1.9
SE	2.1	3.3	3.3	.6	.2		9.5	14.7	6.7	9.9	11.7	9.5
S	7.9	17.1	9.5	1.6	.1		36.2	12.9	37.7	39.2	37.4	32.8
SW	5.9	7.9	2.5	.3	.0		16.6	9.9	19.8	16.1	15.4	16.2
W	3.0	2.5	.7	.4	.1		6.8	10.1	7.0	6.5	3.8	8.1
NW	4.1	3.6	1.4	.5	.1		9.6	10.5	7.6	8.5	8.1	12.0
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	5.2						5.2	.0	5.3	6.6	5.9	3.7
TOT DBS	1108	1245	590	117	16	3076		10.8	474	929	493	1180
TOT PCT	36.0	40.5	19.2	3.8	.5		100.0		100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	5.3	13.1	38.4	34.4	7.0	1.7	.2	10.9	100.0	474
0600Z	6.6	12.8	39.9	30.9	8.5	1.3	0	10.5	100.0	929
1200Z	5.9	14.4	42.2	29.0	7.3	1.2	.0	9.9	100.0	493
1800Z	3.7	9.7	40.8	34.8	9.7	.9	.3	11.4	100.0	1180
TOT	159	366	1243	1004	262	37	5	10.8		3076
PCT	5.2	11.9	40.4	32.6	8.5	1.2	.2		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 6	TOTAL	MEAN CLOUD COVER
N	.6	.6	1.7	3.1		6.3
NE	1.0	.6	.6	1.6		2.4
E	.3	.3	.6	.0		4.6
SE	.6	1.0	.3	.6		4.2
S	28.1	8.9	6.9	5.4		2.7
SW	13.0	1.5	5.5	4.5		3.3
W	1.1	.3	1.2	.9		5.0
NW	.4	.7	2.7	2.3		6.3
VAR	.0	.0	.0	.0		.0
CALM	1.6	.3	.6	.6		3.5
TOT OBS	147	45	63	60	315	3.5
TOT PCT	46.7	14.3	20.0	19.0	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
	149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
N	.0	.0	.0	.6	2.9	1.0	.0	.0	.0	.0	.0	1.4
NE	.3	.0	.0	.4	.6	.5	.0	.0	.0	.0	.0	2.0
E	.0	.0	.0	.2	.3	.0	.0	.0	.0	.0	.0	.6
SE	.0	.0	.0	.0	.3	.6	.0	.0	.0	.0	.0	1.6
S	.0	.0	.0	1.9	4.1	1.4	.3	.0	.0	.0	.0	41.5
SW	.0	.0	.3	2.2	3.5	1.7	.0	.0	.3	.0	.0	18.4
W	.3	.0	.0	.3	.3	.6	.0	.0	.0	.0	.0	2.0
NW	.3	.0	.0	.4	1.0	2.1	.0	.0	.0	.0	.0	2.4
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.3	.3	.3	.0	.0	.0	.0	.0	.0	2.2
TOT OBS	3	0	2	20	42	25	1	0	1	0	221	315
TOT PCT	1.0	.0	.6	6.3	13.3	7.9	.3	.0	.3	.0	70.2	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.3	.3	.3	.3	.3	.3	.3	.3
= OR >5000	.3	.3	.3	.3	.3	.3	.3	.3
= OR >3500	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
= OR >2000	8.4	9.0	9.0	9.0	9.0	9.0	9.3	9.3
= OR >1000	16.5	20.8	21.7	21.7	21.7	22.0	22.4	22.4
= OR >600	20.8	26.4	28.0	28.0	28.0	28.3	28.6	28.6
= OR >300	21.1	26.7	28.6	28.6	28.6	28.9	29.2	29.2
= OR >150	21.1	26.7	28.6	28.6	28.6	28.9	29.2	29.2
= OR >0	21.1	26.7	28.6	28.6	28.9	29.5	30.1	30.1
TOTAL	68	86	92	92	93	95	97	97

TOTAL NUMBER OF OBS: 322

PCT FREQ NH <5/8: 69.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	8 OBSCD	TOTAL OBS
	33.0	13.5	10.2	7.0	5.3	2.9	4.7	6.7	16.1	.6	342

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.2	.0	.0	.0	.4	.1	.2	.2	.0	.0	1.2	
	TOT %	.2	.0	.0	.0	.4	.1	.2	.2	.0	.0	1.2	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.2	.2	.0	.0	.5	.0	.0	.0	.0	.2	1.2	
	TOT %	.2	.2	.0	.0	.5	.0	.0	.0	.0	.2	1.2	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2<5	PCP	.2	.1	.0	.0	.2	.0	.0	.2	.0	.0	.7	
	NO PCP	.2	.0	.5	.0	.8	1.1	.2	.0	.0	.0	2.9	
	TOT %	.4	.1	.5	.0	1.1	1.1	.2	.2	.0	.0	3.6	
5<10	PCP	.2	.1	.2	.0	.2	.1	.2	.3	.0	.0	1.2	
	NO PCP	2.4	1.8	.5	1.3	7.1	3.1	.7	.5	.0	.2	17.6	
	TOT %	2.6	1.9	.7	1.3	7.3	3.2	1.0	.8	.0	.2	18.8	
10+	PCP	.2	.1	.0	.0	.0	.0	.0	.2	.0	.0	.5	
	NO PCP	2.8	3.1	.7	1.7	38.4	19.9	2.1	4.0	.0	2.1	74.8	
	TOT %	3.0	3.2	.7	1.7	38.4	19.9	2.1	4.3	.0	2.1	75.2	
TOT OBS													420
TOT PCT		6.4	5.4	1.8	2.9	47.6	24.2	3.5	5.6	.0	2.6	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.2	.0	.0	.0	.4	.1	.2	.2	.0	.0	1.0	
	11-21	.2	.0	.0	.0	.2	.0	.0	.0	.0	.0	.3	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.3	.0	.0	.0	.5	.1	.2	.2	.0	.0	1.3	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	
	4-10	.2	.2	.0	.0	.3	.0	.0	.0	.0	.0	.6	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.2	.2	.0	.0	.3	.0	.0	.0	.0	.2	.8	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.2	
	11-21	.1	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.0	.0	.1	.1	.0	.0	.1	.0	.0	.3	
2<5	0-3	.1	.0	.0	.0	.1	.2	.2	.1	.0	.5	1.1	
	4-10	.2	.0	.3	.0	.5	.6	.1	.4	.0	.0	2.1	
	11-21	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
	22+	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	TOT %	.4	.1	.3	.0	.9	.9	.2	.5	.0	.5	3.8	
5<10	0-3	.1	.7	.2	.2	.4	.6	.2	.2	.0	1.0	3.3	
	4-10	1.1	.6	.2	.4	1.9	.8	.6	.6	.0	.0	6.0	
	11-21	1.0	.5	.1	.4	3.2	1.2	.0	.2	.0	.0	6.5	
	22+	.1	.1	.0	.0	.1	.1	.2	.0	.0	.0	.5	
	TOT %	2.2	1.9	.4	.9	5.5	2.7	.9	1.0	.0	1.0	16.3	
10+	0-3	.2	.6	.2	.3	1.9	1.0	.5	.7	.0	3.6	9.0	
	4-10	2.7	1.7	.6	1.1	10.8	9.9	1.8	2.4	.0	.0	31.1	
	11-21	1.6	1.0	.0	.4	17.0	8.7	.1	1.0	.0	.0	29.8	
	22+	.0	.0	.0	.2	6.1	1.2	.1	.0	.0	.0	7.6	
	TOT %	4.6	3.3	.8	2.1	35.7	20.8	2.5	4.0	.0	3.6	77.5	
TOT OBS													631
TOT PCT		7.8	5.5	1.5	3.1	43.0	24.4	3.8	5.7	.0	5.2	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HR	000	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
(GMT)	149	299	599	999	1999	3499	4999	6499	7999				
00003	.0	.0	1.3	3.9	10.4	2.6	1.3	.0	1.3	.0	20.8	79.2	77
06009	1.0	.0	.0	7.2	11.3	6.2	.0	.0	.0	.0	25.8	74.2	97
12015	1.3	.0	.0	7.9	13.2	13.2	.0	.0	.0	.0	35.5	64.5	76
18021	1.2	.0	1.2	4.8	15.7	9.6	2.4	.0	.0	.0	34.9	65.1	83
TOT	3	0	2	20	42	26	3	0	1	0	97	236	333
PCT	.9	.0	.6	6.0	12.6	7.8	.9	.0	.3	.0	29.1	70.9	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL
(GMT)							OBS
00003	.8	.0	.0	2.3	12.4	84.5	129
06009	1.4	.5	.5	4.1	17.3	76.4	220
12015	3.0	2.2	.0	3.0	15.6	76.3	135
18021	.0	1.2	.6	4.9	21.3	72.0	164
TOT	8	6	2	24	110	498	648
PCT	1.2	.9	.3	3.7	17.0	76.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NH >4/8), BY HOUR

HR	<150	<600	<1000	1000+	NH <5/8	TOTAL
(GMT)	<300D	<1	<5	AND5+	AND 5+	OBS
00003	.0	2.8	7.0	15.5	77.5	71
06009	1.1	1.1	9.5	17.9	72.6	95
12015	1.4	2.7	13.5	24.3	62.2	74
18021	1.2	2.4	9.8	25.6	64.6	82
TOT	3	7	32	67	223	322
PCT	.9	2.2	9.9	20.8	69.3	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL	PCT
									OBS	FREQ
65/69	.0	.0	.0	.2	.0	.0	.0	.0	1	.2
60/64	.0	.0	.0	.4	1.5	2.2	.4	.2	22	4.8
55/59	.0	.0	.0	.7	2.4	12.4	20.4	7.2	198	43.0
50/54	.0	.0	.0	.4	6.5	9.1	20.9	11.7	224	48.7
45/49	.0	.0	.0	.0	.2	1.5	1.3	.2	15	3.3
TOTAL	0	0	0	8	49	116	198	89	460	100.0
PCT	.0	.0	.0	1.7	10.7	25.2	43.0	19.3		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
.7	.2	.4	.1	2.1	.9	.0	.2	.0	.2
4.7	3.7	.0	1.4	17.9	7.6	3.1	3.5	.0	1.1
1.5	2.1	1.6	2.1	23.3	13.0	1.1	2.6	.0	1.5
.0	.0	.0	.4	1.3	1.6	.0	.0	.0	.0
6.8	6.0	2.1	4.0	44.6	23.0	4.2	6.5	.0	2.8

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL
(GMT)									OBS
00003	66	63	58	54	50	48	47	54.1	478
06009	67	59	57	53	49	46	44	53.0	935
12015	70	60	58	54	49	47	44	53.6	480
18021	72	65	61	56	51	49	47	55.9	1079
TOT	72	63	60	54	50	47	44	54.3	2972

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL
(GMT)								OBS
00003	.0	1.0	9.5	27.6	45.7	16.2	81	105
06009	.0	1.4	11.0	14.5	49.7	23.4	83	145
12015	.0	.9	10.8	23.0	47.8	17.7	82	113
18021	.0	5.0	13.3	35.8	27.5	18.3	79	120
TOT	0	10	34	119	207	93	82	489

SEPTEMBER

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1864-1977

AREA 0028 VALPARAISO
34.45 73.2W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	TOT	N FOG	NO FOG
14/16	.0	.0	.0	.0	.0	.5	2	.0	.5
9/10	.0	.0	.0	.5	.5	.0	4	.0	1.0
7/8	.0	.0	.3	1.0	.0	.0	5	.0	1.3
6	.0	.0	.3	1.3	.3	.0	7	.0	1.8
5	.0	.0	.5	3.1	.3	.0	15	.0	3.9
4	.0	.0	1.3	2.6	.3	.0	16	.3	3.9
3	.0	.0	2.9	2.9	.0	.0	22	.0	3.7
2	.0	.5	3.5	2.3	.3	.0	33	.8	7.8
1	.3	1.3	8.8	1.3	.0	.0	45	.5	11.2
0	.0	1.6	11.9	1.0	.0	.0	56	.3	14.3
-1	.0	2.6	10.4	.8	.0	.0	53	.5	13.2
-2	.0	6.8	5.7	.3	.0	.0	49	.5	12.2
-3	.0	4.2	4.7	.0	.0	.0	34	.8	8.1
-4	.3	3.4	1.3	.0	.0	.0	19	.3	4.7
-5	.5	3.1	1.0	.0	.0	.0	18	.3	4.4
-6	.0	.3	.3	.0	.0	.0	2	.0	.5
-7/-8	.5	.3	.3	.0	.0	.0	4	.0	1.0
-9/-10	.3	.0	.0	.0	.0	.0	1	.0	.3
TOTAL	7	92	212	66	6	2	385	16	369
PCT	1.8	23.9	55.1	17.1	1.6	.3	100.0	4.2	95.8

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							PCT	NE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	1.7	.4	.0	.0	.0	2.1	.6	.0	.1	.0	.0	.0	.0	.7	1.2
1-2	.0	1.4	.0	.0	.0	.0	1.4	.0	1.2	.0	.0	.0	.0	.0	.0	2.2
3-4	.0	.4	1.4	.0	.0	.0	1.8	.0	1.4	.8	.0	.0	.0	.0	.0	.0
5-6	.0	.6	.6	.0	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.4	.0	.0	.4	.0	.0	.0	.0	.1	.0	.0	.1	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	4.0	2.3	.4	.0	.0	6.8	.6	2.6	1.0	.1	.0	.0	.0	4.3	

HGT	E							PCT	SE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.6
1-2	.0	.6	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.4	.0	.0	.0	.0	.4	.0	.0	.7	.0	.0	.0	.0	.7	.7
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.6	.6
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.3	.3
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.0	.0	.0	.0	.0	1.0	.0	1.1	1.2	.1	.1	.0	.0	2.6	

PERIOD: (OVER-ALL) 1963-1977

SEPTEMBER

AREA 0028 VALPARAISO
34.4S 73.2W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.4	1.0	.0	.0	.0	.0	1.4	.7	2.3	.0	.0	.0	.0	3.0
1-2	1.2	2.1	1.1	.0	.0	.0	4.4	1.0	3.5	1.7	.0	.0	.0	6.1
3-4	.0	3.7	12.6	1.4	.0	.0	17.7	.0	3.6	3.3	.8	.0	.0	7.7
5-6	.4	1.5	8.0	1.0	.0	.0	10.9	.1	.7	3.0	.1	.0	.0	4.0
7	.0	.0	5.2	3.0	.0	.0	8.3	.0	.0	1.4	.3	.0	.0	1.7
8-9	.0	.0	1.0	.0	.0	.0	1.0	.0	.6	.7	.6	.0	.0	1.8
10-11	.0	.0	.0	1.0	.6	.0	1.5	.0	.0	.0	.7	.0	.0	.7
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.8	1.5	.4	.0	2.8	.0	.0	.3	.0	.0	.0	.3
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	2.1	8.3	28.7	7.9	1.0	.0	47.9	1.8	10.6	10.4	2.5	.0	.0	25.3

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.4	1.0	.0	.0	.0	.0	1.4	.1	.1	.0	.0	.0	.0	.3	
1-2	.0	1.1	.0	.0	.0	.0	1.1	.0	.7	.6	.0	.0	.0	1.2	
3-4	.0	1.0	.0	.0	.0	.0	1.0	.0	1.1	.0	.0	.0	.0	1.1	
5-6	.0	.6	.0	.0	.0	.0	.6	.0	.6	.0	.0	.0	.0	.6	
7	.0	.6	.0	.0	.0	.0	.6	.0	.0	.6	.0	.0	.0	.6	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.6	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.4	4.1	.0	.6	.0	.0	5.1	.1	2.5	1.1	.0	.0	.0	3.7	96.7

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	6.0	7.1	.5	.0	.0	.0	13.6	
1-2	2.7	10.9	3.3	.0	.0	.0	16.8	
3-4	.0	11.4	18.5	2.2	.0	.0	32.1	
5-6	.5	3.8	12.0	1.1	.0	.0	17.4	
7	.0	.5	7.1	3.3	.0	.0	10.9	
8-9	.0	.5	1.6	1.1	.0	.0	3.3	
10-11	.0	.0	.0	2.2	.5	.0	2.7	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	1.1	1.6	.5	.0	3.3	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	9.2	34.2	44.0	11.4	1.1	.0	100.0	184

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.0	4.5	11.1	3.8	2.1	.7	.7	.0	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	73	4
6-7	.3	.3	3.8	10.4	9.3	1.7	1.0	1.7	2.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	89	7
8-9	.0	.3	1.7	4.8	8.3	2.4	.0	.3	2.8	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	61	7
10-11	.0	.0	1.0	1.4	2.8	.0	.3	1.0	1.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	34	8
12-13	.0	.0	1.7	.0	.7	1.4	.7	.3	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	7
13-14	.0	.0	.0	.3	1.0	.7	.0	.0	.3	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	11
INDET	1.4	.7	2.8	.0	.0	.7	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	17	3
TOTAL	8	17	64	60	70	22	9	10	22	7	0	0	0	0	0	0	0	0	0	9	6
PCT	2.8	5.9	22.1	20.8	24.2	7.6	3.1	3.5	7.6	2.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1864-1977

OCTOBER

AREA 0028 VALPARAISO
34.53 73.0W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA						
WIND DIR	RAIN	RAIN SHWR	DRZL	FRIG PCPN	SNOW	OTHFR FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA	
N	5.9	.0	6.7	.0	.0	.0	.0	12.6	6.7	.0	3.4	3.4	3.4	.0	70.6	
NE	2.6	.0	.0	.0	.0	.0	.0	2.6	.0	.0	21.1	.0	.0	.0	76.3	
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.6	.0	91.1	
S	.5	.0	.0	.0	.0	.0	.0	.5	1.0	.0	.4	.0	1.4	.0	96.6	
SW	1.6	.8	.8	.0	.0	.0	.0	3.2	3.2	.0	5.0	.0	1.6	.0	86.9	
W	5.8	7.3	.0	.0	.0	.0	.0	13.1	2.9	.0	.0	.0	.0	.0	83.9	
NW	.0	1.7	6.8	.0	.0	.0	.0	8.5	3.4	.0	3.4	3.4	.0	.0	81.4	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	
TOT PCT	1.6	.9	1.1	.0	.0	.0	.0	3.6	2.3	.0	2.5	.7	1.4	.0	89.5	
TOT OBS:	440															

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00003	1.0	2.0	1.0	.0	.0	.0	.0	3.9	2.0	.0	2.0	1.0	2.0	.0	89.2
06009	3.7	.7	1.5	.0	.0	.0	.0	6.0	2.2	.7	3.0	.0	.7	.0	87.3
12015	1.9	1.0	2.9	.0	.0	.0	.0	5.7	2.9	.0	1.9	1.9	1.9	.0	85.7
18021	.0	.0	.0	.0	.0	.0	.0	.0	1.8	.0	2.7	.0	.9	.0	94.6
TOT PCT TOT OBS:	1.8 452	.9	1.3	.0	.0	.0	.0	4.0	2.2	.2	2.4	.7	1.3	.0	89.2

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	0-3	WIND SPEED (KNOTS)						48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
		4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21		
N	1.2	3.4	1.6	.3	.1	.0		6.6	9.2	5.7	.0	6.3	5.5	5.3	.0	9.3	5.8		
NE	.3	.9	.2	.1	*	.0		1.5	8.5	1.1	.0	.9	.6	2.2	.0	2.5	1.0		
E	.3	.6	.1	.0	.0	.0		1.0	6.3	.4	.0	.8	1.6	1.6	.0	1.1	.2		
SE	.7	3.0	2.9	1.0	.1	.0		7.7	12.3	5.8	8.3	7.4	8.6	10.9	2.3	7.9	5.6		
S	2.5	14.4	20.5	4.7	.2	.0		42.3	13.0	44.1	58.3	45.4	50.2	42.3	31.8	35.1	40.5		
SW	2.4	8.5	7.8	.9	.0	.0		19.7	10.6	24.8	25.0	19.9	11.9	15.7	54.5	20.0	23.8		
W	.8	4.2	1.9	.2	.1	.0		7.2	9.2	6.0	8.3	6.9	5.5	7.9	2.3	8.1	9.1		
NW	1.1	5.6	2.6	.4	.2	.0		9.9	9.8	8.5	.0	8.2	8.7	9.2	.0	12.9	11.5		
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
CALM	4.2							4.2	.0	3.5	.0	4.2	7.5	4.9	9.1	3.0	2.4		
TOT OBS	405	1220	1128	226	20	0	2999			481	12	547	428	428	22	744	337		
TOT PCT	13.5	40.7	37.6	7.5	.7	.0		100.0	11.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
		7-16	17-27	28-40	00 03					06 09	12 15	18 21		
N	2.9	2.7	.9	.2	.0		6.6	9.2	5.6	5.9	5.0	8.3		
NE	.8	.6	.1	.1	.0		1.5	8.5	1.1	.8	2.1	2.0		
E	.6	.3	.1	.0	.0		1.0	6.3	.4	1.2	1.6	.8		
SE	2.1	3.4	1.9	.3	.0		7.7	12.3	5.8	7.9	10.5	7.1		
S	7.7	20.9	12.5	1.2	*		42.3	13.0	44.5	47.5	41.8	36.8		
SW	6.2	9.3	4.0	.2	.0		19.7	10.6	24.8	16.4	17.6	21.2		
W	2.9	2.5	.7	.1	.0		7.2	9.2	6.1	6.3	7.7	8.4		
NW	3.9	4.6	1.2	.1	.1		9.9	9.8	8.3	8.4	8.7	12.5		
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		
CALM	4.2						4.2	.0	3.4	5.6	5.1	2.8		
TOT OBS	933	1335	639	65	5	2999			493	975	450	1081		
TOT PCT	31.2	45.2	21.3	2.2	.2		100.0	11.0	100.0	100.0	100.0	100.0		

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1864-1977

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34.55 73.0W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	3.4	10.1	39.4	38.5	7.7	.8	.0	11.2	100.0	493
0600Z	3.6	10.2	41.2	35.8	6.5	.7	.0	10.5	100.0	975
1200Z	5.1	9.6	40.2	38.2	6.0	.9	.0	10.7	100.0	450
1800Z	2.8	8.1	41.0	38.6	9.1	.5	.0	11.4	100.0	1081
TOT	125	280	1220	1128	226	20	0	11.0		2999
PLT	4.2	9.3	40.7	37.6	7.5	.7	.0		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	.5	.4	1.2	4.8		6.7
NE	.3	.4	.4	1.0		5.9
E	.0	.0	.0	.5		8.0
SE	.3	.4	.5	.3		4.6
S	21.0	6.5	9.6	8.3		3.5
SW	11.4	3.2	5.6	6.5		4.0
W	2.0	.7	3.1	2.3		5.4
NW	.5	.7	2.2	3.8		6.4
VAR	.0	.0	.0	.0		.0
CALM	.3	.0	.6	.6		6.0
TOT OBS	124	42	79	96	341	4.3
TOT PCT	36.4	12.3	23.2	28.2	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
149	299	599	1199	2399	4799	9599	19199	38399	76799		
.0	.0	.3	1.1	2.9	.8	.0	.0	.0	.0	1.8	
.3	.0	.1	.0	.1	.3	.0	.0	.0	.0	1.2	
.0	.0	.2	.0	.3	.0	.0	.0	.0	.0	.0	
.0	.0	.0	.3	.3	.0	.0	.0	.0	.0	1.0	
.0	.0	.9	1.5	3.2	5.1	.6	.2	.0	1.9	32.0	
.3	.0	.6	1.5	4.1	1.9	.3	.1	.3	1.0	16.6	
.0	.0	.6	.6	.8	.8	.0	.3	.0	.3	4.8	
.0	.6	.3	1.0	.5	1.6	.3	.6	.0	.0	2.3	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.3	.0	.0	.0	.0	.3	.0	.0	.9	
2	2	11	20	42	36	4	5	1	11	207	341
.6	.6	3.2	5.9	12.3	10.6	1.2	1.3	.3	3.2	60.7	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	1.7	3.4	3.4	3.4	3.4	3.4	3.4	3.4
= OR >5000	3.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
= OR >3500	4.0	6.3	6.3	6.3	6.3	6.3	6.3	6.3
= OR >2000	13.4	16.9	16.9	16.9	16.9	16.9	16.9	16.9
= OR >1000	22.0	29.4	29.4	29.4	29.4	29.4	29.4	29.4
= OR >400	25.1	34.6	35.1	35.1	35.1	35.1	35.1	35.1
= OR >300	26.9	36.9	38.0	38.6	38.6	38.6	38.6	38.6
= OR >150	27.1	37.4	38.6	39.1	39.1	39.1	39.1	39.1
= OR >0	27.1	37.4	38.6	39.1	39.4	39.7	39.7	39.7
TOTAL	95	131	135	137	138	139	139	139

TOTAL NUMBER OF OBS: 350

PCT FREQ NH <5/8: 60.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
20.5	13.8	14.3	7.9	4.2	2.8	9.8	3.4	22.8	.6	356

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PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1864-1977

TABLE 8

AREA 0028 VALPARAISO
34.55 73.0WPERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	ND PCP	.0	.2	.0	.0	.0	.7	.0	.0	.0	.0	.0	.9
	TOT %	.0	.2	.0	.0	.0	.7	.0	.0	.0	.0	.0	.9
1/2<1	PCP	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2
	ND PCP	.0	.2	.0	.0	.2	.3	.0	.0	.0	.0	.7	.7
	TOT %	.2	.2	.0	.0	.2	.3	.0	.0	.0	.0	.9	.9
1<2	PCP	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.5	.5
	ND PCP	.0	.2	.0	.0	.0	.2	.2	.0	.0	.0	.5	.5
	TOT %	.0	.2	.0	.0	.0	.2	.2	.0	.0	.0	.9	.9
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	ND PCP	.5	.0	.0	.0	.0	.5	.0	.5	.0	.0	1.4	1.4
	TOT %	.5	.0	.0	.0	.0	.5	.0	.5	.0	.0	1.4	1.4
5<10	PCP	.6	.1	.0	.0	.2	.7	.8	.3	.0	.0	2.7	2.7
	ND PCP	2.1	.6	.2	2.2	9.7	6.3	1.5	1.8	.0	.5	24.8	24.8
	TOT %	2.7	.7	.2	2.2	9.9	7.0	2.3	2.1	.0	.5	27.5	27.5
10+	PCP	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2	.2
	ND PCP	3.4	.8	.2	1.0	33.6	19.5	5.3	3.9	.0	.7	68.2	68.2
	TOT %	3.4	.8	.2	1.0	33.6	19.5	5.3	3.9	.0	.7	68.4	68.4
TOT OBS		6.8	2.2	.4	3.2	43.7	28.2	7.8	6.7	.0	1.1	100.0	440
TOT PCT													

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.1	.0	.0	.1	.1	.0	.0	.0	.0	.3	.3
	4-10	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	.1
	11-21	.0	.0	.0	.0	.1	.5	.0	.0	.0	.0	.6	.6
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.1	.0	.0	.1	.7	.0	.0	.0	.0	1.0	1.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	.3	.3
	11-21	.1	.0	.0	.0	.1	*	.0	.0	.0	.0	.3	.3
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.1	.1	.0	.0	.1	.2	.0	.0	.0	.0	.6	.6
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.1	.1	.1	.0	.0	.4	.4
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1
	TOT %	.0	.1	.0	.0	.0	.1	.1	.1	.0	.0	.6	.6
2<5	0-3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.3
	4-10	.0	.0	.0	.0	.1	.4	.1	.2	.0	.0	.9	.9
	11-21	.1	.0	.0	.0	.3	.1	.1	.2	.0	.0	.9	.9
	22+	.0	.0	.0	.0	.1	.1	.0	.1	.0	.0	.3	.3
	TOT %	.3	.0	.0	.0	.5	.6	.1	.6	.0	.1	2.3	2.3
5<10	0-3	.3	.0	.0	.6	1.0	1.0	.1	.3	.0	1.1	4.4	4.4
	4-10	1.0	.1	.0	.5	2.6	2.2	.9	.9	.0	.0	8.3	8.3
	11-21	.8	.2	.1	.4	4.6	3.0	.6	.4	.0	.0	10.1	10.1
	22+	.2	*	.0	.0	1.5	.1	.0	.1	.0	.0	2.0	2.0
	TOT %	2.4	.4	.1	1.5	9.7	6.3	1.6	1.7	.0	1.1	24.8	24.8
10+	0-3	.3	.2	.1	.0	.2	.7	.3	.2	.0	1.9	4.0	4.0
	4-10	1.6	.6	.3	.7	9.8	8.2	2.6	2.8	.0	.0	26.5	26.5
	11-21	1.9	.2	.0	.6	19.7	9.3	1.4	1.2	.0	.0	34.2	34.2
	22+	.1	.0	.0	.0	4.4	1.2	.2	*	.0	.0	6.0	6.0
	TOT %	3.9	1.0	.4	1.3	34.1	19.4	4.5	4.3	.0	1.9	70.8	70.8
TOT OBS		6.7	1.9	.5	2.9	44.6	27.4	6.3	6.7	.0	3.1	100.0	701
TOT PCT													

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1804-1977

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AREA 0028 VALPARAISO
34.55 73.0W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY MGT	TOTAL OBS
00003	.0	1.1	4.6	.0	12.6	14.9	.0	2.3	.0	3.4	39.1	60.9	87
06009	.0	.0	4.0	6.9	12.9	9.9	2.0	1.0	1.0	4.0	41.6	58.4	101
12015	1.2	1.2	2.4	9.4	12.9	7.1	2.4	.0	.0	2.4	38.8	61.2	85
18021	1.2	.0	2.4	6.1	11.0	9.8	.0	3.7	.0	2.4	36.6	63.4	82
TOT PCT	2 .6	2 .6	12 3.4	20 5.6	44 12.4	37 10.4	4 1.1	6 1.7	1 .3	11 3.1	139 39.2	216 60.8	355 100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.7	.0	1.4	1.4	24.3	72.3	148
06009	1.6	.0	.4	3.6	27.9	66.4	247
12015	.0	2.1	.7	2.7	23.3	71.2	146
18021	1.2	.6	.0	1.2	22.1	75.0	172
TOT PCT	7 1.0	4 .6	4 .6	17 2.4	177 24.8	504 70.7	713 100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.0	5.7	6.9	33.3	59.8	87
06009	.0	4.0	12.0	31.0	57.0	100
12015	1.2	4.9	16.0	25.9	58.0	81
18021	1.2	3.7	9.8	26.8	63.4	82
TOT PCT	2 .6	16 4.6	39 11.1	103 29.4	208 59.4	350 100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.0	.0	.5	.0	.2	.0	3	.7
60/64	.0	.0	.0	.5	3.9	2.8	2.1	.0	40	9.3
55/59	.0	.0	.0	.7	5.6	15.3	22.7	10.0	234	54.3
50/54	.0	.0	.0	.2	1.6	5.8	15.1	10.9	145	33.6
45/49	.0	.0	.0	.0	.0	.5	1.2	.5	9	2.1
TOTAL	.0	.0	.0	.6	50	105	178	92	431	100.0
PCT	.0	.0	.0	1.4	11.6	24.4	41.3	21.3		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	.0	.2	.0	.0	.2	.2	.0	.0	.0	.0
60/64	.6	.3	.2	1.2	3.8	2.0	.9	.3	.0	.0
55/59	3.0	1.1	.2	2.9	23.3	14.2	3.4	3.9	.0	2.3
50/54	3.2	.6	.0	.8	13.4	11.0	2.2	2.3	.0	.2
45/49	.0	.0	.0	.0	.2	1.9	.0	.0	.0	.0
TOTAL	6.8	2.2	.4	4.8	40.9	29.3	6.6	6.4	.0	2.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	69	63	60	55	51	50	48	55.4	487
06009	63	60	58	54	50	48	46	54.1	976
12015	64	61	59	55	50	48	46	54.9	437
18021	70	66	63	58	53	50	48	57.7	963
TOT	70	64	61	55	51	49	46	55.6	2863

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	12.4	22.5	41.6	23.6	83	89
06009	.0	.8	7.5	19.5	43.6	28.6	84	133
12015	.0	.0	10.3	23.4	42.1	24.3	83	107
18021	.0	6.0	19.0	31.0	34.5	9.5	77	116
TOT	0	8	54	107	180	96	82	445

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1864-1977

OCTOBER

TABLE 17

AREA 0028 VALPARAISO
34.55 73.0W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	65 68	TOT	N FOG	WD FOG
14/16	.0	.0	.0	.0	.5	2	.0	.5
11/13	.0	.0	.3	.5	.0	3	.0	.8
9/10	.0	.0	.3	.0	.0	1	.0	.3
7/8	.0	.3	1.1	1.3	.0	10	.0	2.6
6	.0	.3	1.0	.3	.0	8	.0	2.1
5	.0	.5	2.1	.3	.3	12	.0	3.2
4	.5	1.1	1.8	1.1	.0	17	.0	4.5
3	.0	2.8	5.0	.0	.0	29	.0	7.6
2	.3	4.5	3.9	.0	.0	33	1.1	7.6
1	.0	10.3	3.4	.5	.0	54	.0	14.2
0	1.6	9.5	2.6	.0	.0	52	.3	13.4
-1	2.4	10.8	3.2	.0	.0	62	.3	16.1
-2	1.6	9.2	1.6	.0	.0	47	.5	11.8
-3	1.3	4.2	.5	.0	.0	23	.0	6.1
-4	1.3	2.4	.5	.0	.0	16	.0	4.2
-5	.8	1.1	.0	.0	.0	7	.0	1.8
-6	.5	.0	.0	.0	.0	2	.0	.5
-7/-8	.5	.0	.0	.0	.0	2	.0	.5
TOTAL	41	215	106	15	3	380	8	372
PCT	10.8	56.6	27.9	3.9	.8	100.0	2.1	97.9

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.4	.0	.0	.0	.0	.4	.5	.5	.5	.0	.0	.0	1.5
1-2	1.0	1.8	1.4	.0	.0	.0	4.2	.0	.6	.5	.0	.0	.0	1.1
3-4	.0	.9	1.6	.0	.0	.0	2.5	.0	.0	.3	.0	.0	.0	.3
5-6	.0	.0	1.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.5	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.0	3.5	4.0	.0	.0	.0	8.6	.5	1.1	1.3	.0	.0	.0	2.9

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.5	.0	.0	.0	.0	.5	.0	1.1	.5	.0	.0	.0	1.6
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3
3-4	.0	.0	.4	.0	.0	.0	.4	.0	.1	.0	.0	.0	.0	.1
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.5	.4	.0	.0	.0	.9	.0	1.4	.8	.0	.0	.0	2.1

PERIOD: (OVER-ALL) 1963-1977

OCTOBER

AREA 0028 VALPARAISO
34.55 73.0W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	1.3	.4	.0	.0	.0	1.6	.5	2.3	.1	.0	.0	.0	2.9
1-2	1.3	2.3	7.4	.0	.0	.0	11.0	.8	2.9	4.9	.0	.0	.0	8.6
3-4	.0	4.7	4.4	1.5	.0	.0	10.6	.0	5.8	4.7	.0	.0	.0	10.5
5-6	.0	1.9	5.2	1.0	.0	.0	8.1	.0	.5	1.4	.0	.0	.0	1.9
7	.0	.4	5.7	1.3	.0	.0	7.3	.0	.1	.9	.3	.0	.0	1.3
8-9	.0	.0	1.8	1.0	.5	.0	3.3	.0	.0	2.3	.0	.0	.0	2.3
10-11	.0	.0	.5	.4	.0	.0	.9	.0	.0	.0	.1	.0	.0	.1
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.3	10.5	25.4	3.2	.5	.0	44.8	1.3	11.6	14.3	.4	.0	.0	27.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.4	.0	.0	.0	.0	.4	.0	.1	.0	.0	.0	.0	.1	
1-2	.0	1.4	1.5	.0	.0	.0	2.9	1.0	2.7	1.6	.0	.0	.0	5.3	
3-4	.0	2.0	1.0	.0	.0	.0	3.0	.0	.1	.8	.0	.0	.0	.9	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.5	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.5	
8-9	.0	.0	.0	.4	.0	.0	.4	.0	.0	.0	.1	.0	.0	.1	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	3.8	2.5	.4	.0	.0	6.7	1.0	2.9	3.4	.1	.0	.0	7.4	99.0

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT DBS
<1	2.0	6.5	1.5	.0	.0	.0	10.0	
1-2	5.5	11.4	17.4	.0	.0	.0	34.3	
3-4	.0	13.4	12.9	1.5	.0	.0	27.9	
5-6	.0	2.5	8.0	1.0	.0	.0	11.4	
7	.0	1.0	7.0	1.5	.0	.0	9.5	
8-9	.0	.0	4.0	1.5	.5	.0	6.0	
10-11	.0	.0	.5	.5	.0	.0	1.0	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	7.5	34.8	51.2	6.0	.5	.0	100.0	201

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.7	9.0	10.3	5.0	3.7	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	91	4
6-7	.3	1.7	5.0	4.7	4.7	4.0	2.7	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	79	6
8-9	.0	1.0	3.3	3.7	4.0	4.3	2.3	1.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	60	7
10-11	.0	.3	.7	3.3	3.3	1.3	2.7	1.3	1.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	43	8
12-13	.0	.0	.0	.7	.7	.3	1.0	1.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	9
13-14	.0	.0	.0	.3	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	9
INDET	.7	.0	1.3	1.7	1.0	.7	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	17	5
TOTAL	5	36	62	58	53	37	30	10	7	2	0	0	0	0	0	0	0	0	0	300	6
PCT	1.7	12.0	20.7	19.3	17.7	12.3	10.0	3.3	2.3	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1869-1977

NOVEMBER

AREA 0028 VALPARAISO
34.55 73.0W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRIG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SNOW	NO SIG WEA
N	2.9	.0	2.9	.0	.0	.0	.0	5.7	2.1	.0	.0	.0	.0	.0	92.1
NE	10.8	.0	5.4	.0	.0	.0	.0	16.2	1.4	.0	.0	.0	5.4	.0	77.0
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
S	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	2.8	.5	1.0	.0	95.0
SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5	.2	.4	.0	95.9
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.3	.0	.0	.0	95.7
NW	.0	.0	10.5	.0	.0	.0	.0	10.5	.0	.0	.0	.0	.0	.0	89.5
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	.8	.0	1.1	.0	.0	.0	.0	1.9	.5	.0	2.4	.3	.8	.0	94.1
TOT OBS:	372														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRIG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00603	1.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	1.0	.0	1.0	.0	97.0
06009	2.0	.0	2.0	.0	.0	.0	.0	4.0	.0	.0	.0	.0	.0	.0	96.0
12015	.0	.0	2.2	.0	.0	.0	.0	2.2	2.2	.0	7.5	1.1	1.1	.0	86.0
18021	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	1.2	.0	97.6
TOT PCT	.8	.0	1.1	.0	.0	.0	.0	1.8	.5	.0	2.4	.3	.8	.0	94.2
TOT OBS:	379														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	1.5	2.9	1.3	.2	.0	.0		5.9	8.3		5.3	7.7	3.3	3.9	6.7	3.1	9.3	5.5
NE	.6	1.2	.1	.0	.0	.0		1.9	5.7		1.6	.0	1.4	1.4	3.0	9.4	2.4	.9
E	.3	.2	.1	.1	.0	.0		.7	8.7		.9	.0	.6	.4	1.0	.0	.9	.2
SE	.7	1.6	1.8	1.3	.2	.0		5.6	15.0		3.9	.0	5.8	8.7	5.9	3.1	5.1	4.9
S	3.1	13.0	20.9	8.0	.7	.0		45.7	14.3		43.4	44.2	48.7	52.8	50.1	35.9	39.0	44.6
SW	2.0	10.1	8.0	2.4	.1	.0		22.6	11.6		28.8	48.1	22.8	14.8	18.0	23.4	22.8	26.4
W	.9	3.6	1.2	.3	.0	.0		5.9	8.4		5.7	.0	5.7	4.8	4.3	.0	7.4	7.7
NW	1.5	3.6	1.9	.3	.0	.0		7.3	8.7		6.8	.0	6.8	6.0	4.9	6.3	10.5	7.5
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	4.3							4.3	.0		3.7	.0	4.7	7.1	6.2	18.8	2.5	2.2
TOT OBS	416	1020	998	350	30	0	2814		11.8		490	13	509	393	405	16	667	321
TOT PCT	14.8	36.2	35.5	12.4	1.1	.0		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40					00	06	12	18
N	2.9	2.3	.7	.1	.0		5.9	8.3	5.3	3.6	6.5	8.1
NE	1.2	.6	.0	.0	.0		1.9	5.7	1.5	1.4	3.3	1.9
E	.4	.2	.1	.0	.0		.7	8.7	.9	.6	1.0	.7
SE	1.4	1.7	1.8	.7	.0		5.6	15.0	3.8	7.1	5.8	5.0
S	8.5	19.2	15.1	2.8	.1		45.7	14.3	43.4	50.5	49.6	40.8
SW	6.0	11.5	4.2	.8	.0		22.6	11.6	29.3	19.3	18.2	24.0
W	2.7	2.7	.3	.1	.0		5.9	8.4	5.5	5.3	4.1	7.5
NW	3.4	3.1	.6	.1	.0		7.3	8.7	6.6	6.5	4.9	9.5
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	4.3						4.3	.0	3.6	5.8	6.7	2.4
TOT OBS	869	1163	645	134	3	2814		11.8	503	902	421	988
TOT PCT	30.9	41.3	22.9	4.8	.1		100.0		100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	3.6	8.3	35.6	28.0	12.7	1.8	.0	12.6	100.0	503
0600Z	5.8	10.3	37.4	22.8	12.7	1.0	.0	11.5	100.0	902
1200Z	6.7	12.8	33.7	34.4	11.6	.7	.0	11.0	100.0	421
1800Z	2.4	10.6	30.8	37.0	12.3	.9	.0	12.0	100.0	988
TOT	122	294	1020	948	350	30	0	11.8		2814
PCT	4.3	10.4	30.2	33.5	12.4	1.1	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & NBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.9	1.1	2.9	4.8		6.4
NE	.0	.0	.0	.7		8.0
E	.4	.0	.0	.7		6.0
SE	.0	.1	.0	.5		7.1
S	14.0	5.8	10.2	12.2		4.4
SW	14.2	4.1	7.1	4.7		3.4
W	1.5	2.7	1.2	1.2		4.2
NW	.7	.0	2.5	2.9		6.3
VAR	.0	.0	.0	.0		.0
CALM	1.1	.0	1.1	.7		4.6
TOT OBS	88	37	67	76	268	4.5
TOT PCT	32.8	13.8	25.0	28.4	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

AND OCCURRENCE OF NH <5/8 WIND DIRECTION											
000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
.3	.0	.0	1.7	3.6	1.4	.3	.0	.0	.0	2.4	
.1	.0	.0	.0	.5	.1	.0	.0	.0	.0	.0	
.0	.0	.0	.0	.4	.4	.0	.0	.0	.0	.4	
.0	.0	.0	.1	.3	.1	.0	.0	.0	.0	.1	
.7	.0	2.1	4.3	6.2	4.8	1.7	.0	.3	.0	22.2	
.7	.0	.6	.8	4.6	1.9	.3	.0	.1	.0	21.1	
.0	.0	.0	.0	1.6	.3	.3	.0	.0	.0	4.5	
.0	.0	.0	.2	1.6	1.6	.5	.0	.0	.0	2.3	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.0	.0	.0	.0	1.5	.0	.0	.0	1.5	
5	0	7	19	50	32	8	0	1	0	146	
1.9	.0	2.6	7.1	18.7	11.9	3.0	.0	.4	.0	54.5	
										268	
										100.0	

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	OR			VSBY (NM)			OR		
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0	>0
= OR >6500	.0	.4	.4	.4	.4	.4	.4	.4	.4
= OR >5000	.0	.4	.4	.4	.4	.4	.4	.4	.4
= OR >3500	2.2	2.9	3.3	3.3	3.3	3.3	3.3	3.3	3.3
= OR >2000	9.9	13.9	15.3	15.3	15.3	15.3	15.3	15.3	15.3
= OR >1000	24.1	31.8	33.2	33.2	33.6	33.6	33.6	33.6	33.6
= OR >600	28.8	38.7	40.1	40.1	40.5	40.5	40.5	40.5	40.5
= OR >300	30.3	41.2	42.7	42.7	43.1	43.1	43.1	43.1	43.1
= OR >150	30.3	41.2	42.7	42.7	43.1	43.1	43.1	43.1	43.1
= OR >0	30.7	42.0	43.4	43.4	43.8	44.2	44.5	44.9	44.9
TOTAL	84	115	119	119	120	121	122	123	123

TOTAL NUMBER OF OBSI 274

PCT FREQ NH <5/8 55.1

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
24.7	10.2	6.9	6.6	6.9	5.3	7.9	9.9	20.7	1.0	304

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.7	.4	.3	.0	.0	.0	.0	1.3
	TOT %	.0	.0	.0	.0	.7	.4	.3	.0	.0	.0	.0	1.3
1/2<1	PCP	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3
	NO PCP	.5	.0	.0	.0	.5	.0	.0	.3	.0	.0	.0	1.3
	TOT %	.5	.0	.0	.0	.5	.0	.0	.5	.0	.0	.0	1.6
5<10	PCP	.0	.5	.0	.0	.0	.0	.0	.3	.0	.0	.0	.8
	NO PCP	2.2	2.4	.0	.1	8.2	5.5	.7	1.1	.0	.3	20.5	
	TOT %	2.2	3.0	.0	.1	8.2	5.5	.7	1.3	.0	.3	21.3	
10+	PCP	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5
	NO PCP	6.2	1.8	1.1	.3	29.3	25.1	5.3	3.2	.0	2.7	74.9	
	TOT %	6.5	2.0	1.1	.3	29.3	25.1	5.3	3.2	.0	2.7	75.5	
TOT OBS													
TOT PCT													
		9.4	5.0	1.1	.5	38.7	30.9	6.3	5.1	.0	3.0	100.0	371

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.3	.3	.1	.1	.0	.0	.0	.7
	11-21	.0	.0	.0	.0	.3	.0	.2	.0	.0	.0	.0	.5
	22+	.0	.0	.0	.0	.3	.2	.0	.0	.0	.0	.0	.5
	TOT %	.0	.0	.0	.0	1.0	.4	.3	.1	.0	.0	.0	1.7
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.2
	11-21	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.2
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0	.3
2<5	0-3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3
	4-10	.2	.0	.0	.0	.5	.2	.0	.0	.0	.0	.0	.9
	11-21	.2	.0	.0	.0	.6	.1	.0	.3	.0	.0	.0	1.2
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.5	.0	.0	.0	1.1	.3	.0	.3	.0	.2	.2	2.4
5<10	0-3	.3	.5	.0	.1	.9	1.0	.2	.3	.0	.7	4.0	
	4-10	.4	1.4	.0	.0	2.2	2.6	.3	.3	.0	.0	7.1	
	11-21	.9	.0	.0	.0	4.5	3.0	.0	.2	.0	.0	8.5	
	22+	.1	.0	.0	.0	1.2	.2	.0	.3	.0	.0	1.7	
	TOT %	1.7	1.9	.0	.1	8.8	6.7	.5	1.0	.0	.7	21.4	
10+	0-3	1.0	.8	.3	.*	1.4	2.6	1.1	.8	.0	2.6	10.8	
	4-10	2.6	.7	.0	.3	6.6	9.0	3.2	1.7	.0	.0	24.0	
	11-21	1.0	.2	.3	.3	15.0	10.0	.8	.9	.0	.0	28.5	
	22+	.0	.0	.0	.*	6.8	3.6	.2	.0	.0	.0	10.6	
	TOT %	4.7	1.7	.7	.7	29.7	25.1	5.3	3.4	.0	2.6	73.9	
TOT OBS													
TOT PCT													
		7.1	3.6	.7	.8	40.8	32.6	6.1	4.9	.0	3.5	100.0	575

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL DBS	NM <5/8 ANY MGT	TOTAL DBS
00003	.0	.0	1.2	3.7	17.3	11.1	3.7	.0	1.2	.0	38.3	61.7	81
06009	.0	.0	2.5	10.0	21.3	7.5	1.3	.0	.0	.0	42.5	57.5	80
12015	5.7	.0	2.9	7.1	20.0	15.7	1.4	.0	.0	.0	52.9	47.1	70
18021	1.6	.0	3.3	6.6	8.2	11.5	4.9	.0	.0	.0	36.1	63.9	61
TOT	5	0	7	20	50	33	8	0	1	0	124	168	292
PCT	1.7	.0	2.4	6.8	17.1	11.3	2.7	.0	.3	.0	42.5	57.5	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL DBS
00003	.7	.7	.0	1.4	22.1	75.0	140
06009	1.1	.0	.5	2.7	22.8	72.8	184
12015	4.8	.0	.8	4.0	19.4	71.0	124
18021	.7	.0	.0	1.5	20.1	77.6	134
TOT	10	1	2	14	124	431	582
PCT	1.7	.2	.3	2.4	21.3	74.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL DBS
00003	.0	2.6	6.4	33.3	60.3	78
06009	.0	2.6	15.8	28.9	55.3	76
12015	6.2	9.2	18.5	38.5	43.1	65
18021	1.8	5.5	14.5	25.5	60.0	55
TOT	5	13	37	87	150	274
PCT	1.8	4.7	13.5	31.8	54.7	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL DBS	PCT FREQ
70/74	.0	.0	.0	.2	.0	.2	.0	.0	2	.5
65/69	.0	.0	.0	.0	.7	.0	.7	.5	8	1.8
60/64	.0	.0	.0	.2	2.5	8.8	7.2	2.7	95	21.4
55/59	.0	.0	.0	.2	2.9	11.3	32.5	9.7	251	56.7
50/54	.0	.0	.0	.0	.9	2.7	9.9	6.1	87	19.6
TOTAL	0	0	0	3	31	102	223	84	443	100.0
PCT	.0	.0	.0	.7	7.0	23.0	50.3	19.0		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
70/74	.0	.0	.0	.0	.0	.2	.2	.1	.0	.0
65/69	.4	.5	.0	.0	.2	.2	.1	.0	.0	.0
60/64	4.2	1.0	.2	.0	6.4	6.4	1.3	1.7	.0	.2
55/59	3.7	2.0	.7	1.0	24.3	18.0	2.1	1.6	.0	3.4
50/54	.0	3.6	.2	.7	7.7	5.2	1.2	.5	.0	.5
TOTAL	8.3	7.1	1.1	1.6	38.6	30.0	5.2	4.0	.0	4.1

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL DBS
00003	68	64	62	57	53	51	48	57.2	491
06009	65	61	59	55	52	50	48	55.6	902
12015	70	64	62	57	52	51	49	57.0	412
18021	72	68	66	59	55	52	49	59.7	872
TOT	72	67	64	57	52	50	48	57.4	2677

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL DBS
00003	.0	.9	4.3	24.3	55.7	14.8	83	115		
06009	.0	.0	2.4	15.9	60.3	21.4	85	126		
12015	.0	.0	9.1	20.0	44.5	26.4	83	110		
18021	.0	2.0	13.1	34.3	38.4	12.1	80	99		
TOT	0	3	31	104	227	85	83	450		

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TABLE 17

AREA 0028 VALPARAISO
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VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	63 68	69 72	TOT	W FOG	WD FOG
11/13	.0	.0	.0	.6	.0	.0	2	.0	.6
9/10	.0	.0	.0	1.2	.3	.3	6	.0	1.8
7/8	.0	.0	.6	1.2	.6	.0	8	.0	2.4
6	.0	.3	.6	1.5	.6	.0	10	.0	3.0
5	.0	.6	2.1	1.5	.0	.0	14	.0	4.3
4	.0	1.2	1.2	1.5	.0	.0	13	.0	4.0
3	.0	.9	2.1	1.2	.0	.0	14	.3	4.0
2	.0	4.3	3.3	2.4	.0	.3	34	.3	10.0
1	.0	7.0	6.1	1.5	.0	.0	48	.0	14.6
0	.3	7.3	7.9	1.5	.0	.0	56	.9	16.1
-1	1.5	7.6	6.1	1.2	.0	.0	54	.0	16.4
-2	.3	5.5	4.6	.3	.0	.0	35	.3	10.3
-3	.0	3.0	.9	.0	.0	.0	13	.6	3.3
-4	.3	2.1	.6	.3	.0	.0	11	.0	3.3
-5	.0	.9	.6	.0	.3	.0	6	.3	1.5
-6	.3	.0	.9	.0	.0	.0	4	.0	1.2
-7/-8	.3	.0	.0	.0	.0	.0	1	.0	.3
TOTAL	10		124		6		329	9	320
PCT	3.0	40.7	37.7	16.1	1.8	.6	100.0	2.7	97.3

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	1.1	2.0	2.2	.0	.0	.0	5.3	.0	.7	.0	.0	.0	.0	.7
3-4	.0	1.1	1.1	.0	.0	.0	2.3	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	1.6	.0	.0	.0	1.6	.0	.0	.1	.0	.0	.0	.1
7	.0	.6	.6	.0	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.1	3.7	5.5	.0	.0	.0	10.3	.0	.7	.1	.0	.0	.0	.9

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.6	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.3
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.6	.0	.0	.0	.6	.1	.0	.3	.1	.0	.0	.6

PERIOD: (OVER-ALL) 1963-1977

NOVEMBER

AREA 0028 VALPARAISO
34.55 73.0W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	1.3
1-2	.6	3.0	2.3	.0	.0	.0	5.9	.6	3.3	3.4	.0	.0	.0	.0	7.8
3-4	.4	4.5	8.8	.0	.0	.0	13.6	.0	1.9	6.8	.6	.0	.0	.0	9.2
5-6	.6	.6	8.6	2.0	.0	.0	11.8	.0	1.7	3.3	.1	.0	.0	.0	5.2
7	.0	.0	3.4	2.2	.0	.0	5.6	.0	.0	2.7	1.9	.0	.0	.0	4.6
8-9	.0	.0	1.1	4.3	.0	.0	5.5	.0	.0	.0	.3	.0	.0	.0	.3
10-11	.0	.0	.4	.9	.0	.0	1.3	.0	.0	.1	.3	.0	.0	.0	.4
12	.0	.0	.0	.0	.6	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	1.6	.0	.0	1.6	.0	.0	.0	.1	.0	.0	.0	.1
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.6
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.6	8.6	24.7	10.9	.6	.0	46.4	1.3	7.5	16.8	3.9	.0	.0	29.5	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.4	.0	.0	.0	.0	.0	.4	.6	.0	.0	.0	.0	.0	.0	1.1
1-2	.0	1.7	1.9	.0	.0	.0	3.6	.0	.1	.7	.0	.0	.0	.0	.9
3-4	.0	.6	.4	.0	.0	.0	1.0	.0	.6	.7	.0	.0	.0	.0	1.3
5-6	.4	.4	.0	.0	.0	.0	.9	.1	.1	.0	.0	.0	.0	.0	.3
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.6
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.9	2.7	2.3	.0	.0	.0	5.9	.7	1.4	1.4	.6	.0	.0	4.2	98.3

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT DBS
<1	3.4	1.7	.0	.0	.0	.0	5.2	
1-2	2.3	10.9	11.5	.0	.0	.0	24.7	
3-4	.6	8.6	17.8	.6	.0	.0	27.6	
5-6	1.1	2.9	13.8	2.3	.0	.0	20.1	
7	.0	.6	6.9	4.0	.0	.0	11.5	
8-9	.0	.0	1.1	4.6	.0	.0	5.7	
10-11	.0	.0	.6	1.7	.0	.0	2.3	
12	.0	.0	.0	.6	.0	.0	.6	
13-16	.0	.0	.0	1.7	.0	.0	1.7	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.6	.0	.0	.6	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	7.5	24.7	51.7	15.3	.6	.0	100.0	174

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FY) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.5	5.5	9.2	3.7	1.5	.0	.7	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	61	4
6-7	.0	.4	7.0	10.3	6.3	3.7	1.8	1.8	.4	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	87	6
8-9	.0	.7	1.1	5.2	8.9	5.5	2.2	1.1	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	69	7
10-11	.0	.7	1.1	.7	2.2	2.2	1.8	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	26	7
12-13	.0	.0	.4	.0	.4	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	7
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	2	13
INDET	.4	1.5	1.8	1.8	.7	.7	.7	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	22	5
TOTAL	5	24	56	60	54	34	21	8	6	0	3	0	0	0	0	0	0	0	0	271	6
PCT	1.8	8.9	20.7	22.1	19.9	12.5	7.7	3.0	2.2	.0	1.1	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1868-1977

DECEMBER

AREA 0028 VALPARAISO
34.58 72.8W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	4.0	1.1	5.2	.0	.0	.0	.0	10.3	8.0	2.3	.0	1.7	2.3	.0	75.3
NE	1.5	3.1	4.6	.0	.0	.0	.0	9.2	1.5	.0	.0	.0	.0	.0	89.2
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	7.7	.0	.0	.0	.0	92.3
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.8	.0	.0	.0	.0	93.2
S	.0	.0	.4	.0	.0	.0	.0	.4	.3	2.2	1.6	.0	3.2	.0	92.2
SW	.6	.0	.6	.0	.0	.0	.0	1.2	1.3	.6	.7	.0	2.6	.0	93.6
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NW	3.4	.0	.0	.0	.0	.0	.0	3.4	.9	.0	3.4	.9	.0	.0	91.4
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	2.3	2.3	.0	11.6	7.0	.0	.0	.0	79.1
TOT PCT	.7	.2	.8	.0	.0	.0	.2	1.8	1.2	2.3	1.5	.2	2.2	.0	90.8
TOT OBS:	596														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG BLWG SNOW	NO SIG WEA
00003	.7	.0	.7	.0	.0	.0	.0	1.4	.0	1.4	.0	.0	2.1	.0	95.1
06009	.6	.0	.0	.0	.0	.0	.0	.6	.6	6.7	1.2	.0	1.8	.0	89.1
12015	1.4	.0	2.0	.0	.0	.0	.7	4.1	3.4	.7	2.0	.7	1.4	.0	87.8
18021	.0	.7	.7	.0	.0	.0	.0	1.4	.7	.0	2.7	.0	3.4	.0	91.9
TOT PCT	.7	.2	.8	.0	.0	.0	.2	1.8	1.2	2.3	1.5	.2	2.2	.0	90.9
TOT OBS:	604														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	0-3	WIND SPEED (KNOTS)						48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
		4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	1.0	3.4	1.2	.2	.0	.0	5.8	7.9	6.0	4.7	4.7	4.8	6.2	23.8	6.5	5.4		
NE	.5	.9	.1	.0	.0	.0	1.6	6.3	1.2	7.8	1.2	1.8	2.2	10.0	1.5	.8		
E	.5	.6	.1	.0	.0	.0	1.2	4.5	.6	.0	.4	1.2	2.4	.0	1.3	1.1		
SE	.5	1.8	2.1	1.1	.1	.0	5.5	13.8	4.1	3.1	4.0	7.4	6.8	5.0	5.7	5.3		
S	2.4	15.9	19.3	9.4	.4	.0	43.4	13.2	39.8	40.6	48.2	50.6	46.5	35.0	38.2	39.9		
SW	2.3	10.7	9.4	2.2	.0	.0	24.7	11.4	31.1	37.5	24.6	18.1	18.9	20.0	24.9	31.2		
W	1.2	3.9	.9	.1	.0	.0	6.1	7.1	6.7	.0	4.5	5.4	2.8	.0	9.4	6.3		
NW	1.0	3.4	1.2	.1	.0	.0	5.6	7.8	5.2	6.3	4.2	5.0	4.2	6.3	7.9	5.9		
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
CALM	6.2						6.2		5.2	.0	8.2	5.7	9.8		4.5	4.2		
TOT OBS	455	1196	1007	268	16	0	2942		481	16	511	421	450	20	711	332		
TOT PCT	15.5	40.7	34.2	9.1	.5	.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)				TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40				00	06	12	18
N	2.9	2.4	.5	.0	.0	5.8	7.9	6.0	4.7	7.0	6.1
NE	1.1	.4	.1	.0	.0	1.6	6.3	1.2	1.3	2.6	1.3
E	1.0	.1	.0	.0	.0	1.2	4.5	.6	.8	2.3	1.2
SE	1.2	2.1	1.8	.3	.0	5.5	13.8	4.0	5.5	6.8	5.6
S	8.8	20.5	12.1	2.0	.0	43.4	13.2	39.8	49.3	46.0	38.8
SW	6.3	13.0	4.8	.6	.0	24.7	11.4	31.3	21.6	19.0	26.9
W	3.3	2.5	.3	.0	.0	6.1	7.1	6.5	4.9	2.7	8.4
NW	2.7	2.6	.3	.0	.0	5.6	7.8	5.3	4.6	4.3	7.3
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	6.2	.0	.0	.0	.0	6.2	.0	5.0	7.1	9.4	4.4
TOT OBS	985	1285	584	86	2	2942	10.8	497	932	470	1043
TOT PCT	33.5	43.7	19.9	2.9	.1	100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1868-1977

DECEMBER

AREA 0028 VALPARAISO
34.9S 72.8W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-23	24-47				
0000Z	5.0	6.8	42.9	34.0	10.5	.8	.0	11.3	100.0	497
0600Z	7.1	10.4	41.8	31.8	8.5	.4	.0	10.4	100.0	932
1200Z	9.4	11.1	35.5	34.7	8.9	.4	.0	10.4	100.0	470
1800Z	4.4	8.7	40.8	36.3	9.1	.6	.0	11.1	100.0	1043
TOT	181	274	1196	1007	268	16	0	10.8		2942
PCT	6.2	9.3	40.7	34.2	9.1	.5	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.2	1.0	1.4	4.5		6.7
NE	.0	.8	.6	1.5		6.3
E	.0	.0	.5	.7		7.2
SE	.6	.1	.2	.2		3.0
S	24.3	4.2	7.7	7.2		3.0
SW	16.2	3.1	4.9	6.1		3.2
W	.9	.7	2.1	1.2		5.1
NW	1.0	.6	1.0	2.0		5.5
VAR	.0	.0	.0	.0		.0
CALM	1.7	.7	.7	1.0		3.8
TOT OBS	183	46	78	100	407	3.7
TOT PCT	45.0	11.3	19.2	24.6	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH ANY	<5/8 HGT	TOTAL OBS
.4	.2	.9	.4	1.7	1.2	.7	.0	.0	.0		1.7	
.1	.1	.1	.0	.8	.5	.5	.0	.0	.0		.9	
.0	.0	.0	.0	.2	.2	.0	.0	.5	.0		.2	
.0	.0	.0	.0	.4	.1	.1	.0	.0	.0		.7	
.2	.4	.5	3.2	4.5	1.8	.6	.0	.2	.2		31.9	
.1	.1	.2	2.7	3.4	1.5	.9	.0	.1	.0		21.3	
.0	.0	.0	.0	.9	.9	.2	.0	.2	.2		2.5	
.0	.0	.0	.6	1.5	.6	.0	.0	.0	.0		2.1	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	
.5	.0	.2	.0	.7	.0	.0	.0	.0	.0		2.7	
5	3	8	28	57	28	12	0	4	2		260	
1.2	.7	2.0	6.9	14.0	6.9	2.9	.0	1.0	.5		63.9	407 100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
>5000	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
>3500	3.4	4.1	4.4	4.4	4.4	4.4	4.4	4.4
>2000	8.3	10.7	11.2	11.2	11.2	11.2	11.2	11.2
>1000	15.1	24.1	25.3	25.5	25.8	25.8	25.8	25.8
>600	18.0	30.2	32.1	32.4	32.6	32.6	32.6	32.6
>300	18.5	32.1	34.1	34.3	34.5	34.5	34.5	34.5
>150	19.0	32.8	34.8	35.0	35.3	35.3	35.3	35.3
>0	19.2	33.1	35.3	35.8	36.0	36.0	36.3	36.3
TOTAL	79	136	145	147	148	148	149	149

TOTAL NUMBER OF OBS: 411

PCT FREQ NH <5/8: 63.7

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
30.8	12.5	9.5	6.9	3.7	4.2	4.9	6.0	20.8	.7	432

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PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1808-1977AREA 0028 VALPARAISO
34.55 72.8W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.3	*	.0	.0	.0	.2	.5	
	TOT %	.0	.0	.0	.0	.3	*	.0	.0	.0	.2	.5	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	
1<2	PCP	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2	
	NO PCP	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2	.3	
	TOT %	.0	.0	.0	.0	.2	.2	.0	.0	.0	.2	.5	
2<5	PCP	.1	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	
	NO PCP	.1	*	.0	.2	.6	.7	.5	*	.0	.0	2.2	
	TOT %	.3	.1	.0	.2	.6	.7	.5	*	.0	.0	2.4	
5<10	PCP	.6	.2	.0	.0	.2	.0	.0	.2	.0	.0	1.2	
	NO PCP	2.9	.9	1.2	1.3	7.8	6.7	2.1	2.6	.0	2.5	28.1	
	TOT %	3.6	1.1	1.2	1.3	8.0	6.7	2.1	2.8	.0	2.5	29.3	
10+	PCP	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2	.3	
	NO PCP	3.5	1.5	1.0	1.0	29.8	20.9	3.0	2.1	.0	4.0	66.8	
	TOT %	3.5	1.5	1.0	1.0	29.8	21.0	3.0	2.1	.0	4.2	67.2	
TOT OBS													594
TOT PCT		7.3	2.7	2.2	2.5	38.8	28.7	5.6	4.9	.0	7.2	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	
	4-10	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.2	
	11-21	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.4	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.3	.3	.0	.0	.0	.1	.7	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.2	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.1	.1	.0	.0	.0	.1	.4	
2<5	0-3	.0	.0	.0	.0	.0	.0	.1	*	.0	.1	.2	
	4-10	.1	*	.0	.0	.5	.5	.1	.0	.0	.0	1.2	
	11-21	.2	*	.0	.1	.1	.2	.1	.2	.0	.0	1.1	
	22+	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.2	
	TOT %	.3	.1	.0	.1	.7	.9	.3	.3	.0	.1	2.8	
5<10	0-3	.2	.2	.4	.0	.3	.1	.2	.4	.0	2.2	4.0	
	4-10	2.2	.5	.4	.9	3.2	2.0	1.3	1.5	.0	.0	12.7	
	11-21	.9	*	.0	.1	4.3	4.4	.2	.3	.0	.0	10.2	
	22+	.0	.0	.0	.0	.9	.7	.0	.1	.0	.0	1.7	
	TOT %	3.3	.8	.8	1.0	8.7	7.7	1.7	2.3	.0	2.2	28.5	
10+	0-3	.5	.4	.1	.1	1.4	1.0	.4	.3	.0	3.5	7.7	
	4-10	1.5	.8	.6	.3	9.4	8.1	2.4	1.3	.0	.0	24.4	
	11-21	.9	.2	.0	.2	14.9	9.3	.3	.4	.0	.0	26.2	
	22+	.1	.0	.0	.2	5.2	3.5	.0	.0	.0	.0	8.9	
	TOT %	3.1	1.4	.7	.8	30.9	21.8	3.2	1.9	.0	3.5	67.4	
TOT OBS													827
TOT PCT		6.7	2.3	1.6	2.0	40.7	30.9	5.2	4.5	.0	6.3	100.0	

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PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1888-1977

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34.95 72.8W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET) NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL DBS
00003	.0	2.8	.9	6.5	12.1	8.4	2.8	.0	.0	.9	34.6	65.4	107
06009	.9	.0	1.7	4.3	17.4	6.1	6.1	.0	1.7	.0	38.3	61.7	115
12015	1.9	.0	3.8	9.4	15.1	6.6	1.9	.0	.9	.0	39.6	60.4	106
18021	2.1	.0	1.0	6.3	11.5	5.2	.0	.0	1.0	1.0	28.1	71.9	96
TOT	5	3	8	28	60	28	12	0	4	2	150	274	424
PCT	1.2	.7	1.9	6.6	14.2	6.6	2.8	.0	.9	.5	35.4	64.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NH) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<3	3<10	10+	TOTAL DBS
00003	.0	.0	.0	1.1	26.2	72.7	103
06009	.8	.4	.4	3.4	30.7	64.4	264
12015	1.1	.6	1.1	2.8	26.5	68.0	181
18021	1.0	.0	.0	3.4	30.4	65.2	207
TOT	6	2	3	23	240	561	835
PCT	.7	.2	.4	2.8	28.7	67.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NH) AND/OR
CEILING HGT (FEET) NH >4/8) BY HOUR

HOURL (GMT)	<150 <50YD	<600 ≤1	<1000 ≤5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL DBS
00003	.0	3.8	11.5	25.0	63.5	104
06009	.9	3.5	10.6	28.3	61.1	113
12015	1.0	5.9	17.6	23.5	58.8	102
18021	2.2	3.3	13.0	18.5	68.5	92
TOT	4	17	54	99	258	411
PCT	1.0	4.1	13.1	24.1	62.8	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL DBS	PCT FREQ
70/74	.0	.0	.0	.3	1.2	.0	.9	.3	16	2.8
65/69	.0	.0	.0	.0	2.3	4.7	2.6	1.0	61	10.6
60/64	.0	.0	.0	.0	2.9	14.9	19.8	6.8	256	44.4
55/59	.0	.0	.0	.0	1.2	8.1	18.5	9.7	217	37.6
50/54	.0	.0	.0	.0	.0	.2	1.7	2.6	26	4.5
45/49	.0	.0	.0	.0	.0	.0	.2	.0	1	.2
TOTAL	0	0	0	2	44	161	252	118	577	100.0
PCT	.0	.0	.0	.3	7.6	27.9	43.7	20.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
70/74	.3	.2	.4	.6	.9	.3	.3	.2	.0	.2
65/69	1.4	.3	.4	.6	2.2	2.8	1.3	.8	.0	.7
60/64	3.3	1.5	1.3	1.0	15.3	12.7	4.0	2.8	.0	2.6
55/59	1.6	.9	.8	1.1	17.1	9.8	.7	1.4	.0	4.2
50/54	.1	.0	.2	.3	2.1	1.6	.0	.0	.0	.2
45/49	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	6.9	2.9	3.1	3.1	37.5	27.2	6.4	5.2	.0	7.8

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL DBS
00003	69	67	65	60	55	53	46	60.0	484
06009	69	65	63	58	54	52	50	57.9	921
12015	72	68	65	59	55	53	51	59.6	448
18021	79	72	69	62	57	54	52	62.5	914
TOT	79	70	67	60	55	53	46	60.1	2767

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL DBS
00003	.0	.0	4.5	29.3	48.1	18.0	83	133
06009	.0	.0	1.2	17.8	50.3	30.7	86	163
12015	.0	.0	5.8	28.8	44.6	20.9	83	139
18021	.0	1.3	18.8	36.9	30.9	12.1	78	149
TOT	0	2	44	163	254	121	83	584

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1868-1977

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	65 68	69 72	73 76	TOT	N FOG	NO FOG
14/16	.0	.0	.0	.0	.4	.0	.0	2	.0	.4
11/13	.0	.0	.0	.2	.6	.2	.2	6	.0	1.2
9/10	.0	.0	.0	1.0	.8	.6	.0	12	.4	1.9
7/8	.0	.0	.4	1.0	1.0	1.0	.0	17	.0	3.3
6	.0	.0	.2	1.3	.8	.4	.0	14	.0	2.7
5	.0	.0	1.5	2.3	1.3	.0	.0	27	.0	5.2
4	.0	.4	1.2	2.7	1.3	.2	.2	32	.0	6.2
3	.0	.0	2.3	3.5	.6	.0	.0	33	.0	6.3
2	.0	1.3	5.2	6.9	1.0	.0	.0	75	.0	14.4
1	.0	1.7	4.4	6.0	.6	.0	.0	66	.2	12.5
0	.0	1.2	7.9	5.6	1.3	.0	.0	84	.2	16.0
-1	.0	1.7	7.1	2.3	.4	.0	.0	60	.4	11.2
-2	.0	1.3	4.4	1.3	.0	.0	.0	37	.0	7.1
-3	.0	1.0	3.1	1.3	.0	.0	.0	28	.0	5.4
-4	.2	.2	1.7	.0	.0	.0	.0	11	.2	1.9
-5	.0	1.0	.0	.6	.0	.0	.0	8	.2	1.3
-6	.0	1.0	.2	.0	.0	.0	.0	6	.0	1.2
-7/-8	.0	.0	.0	.2	.0	.0	.0	1	.0	.2
-9/-10	.0	.0	.0	.2	.0	.0	.0	1	.0	.2
TOTAL	1	56	189	52	14	2		520	1.5	98.5
PCT	.2	10.8	39.6	36.3	10.0	2.7	.4	100.0	1.5	98.5

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.6	2.2	.0	.0	.0	.0	2.8	1.0	.9	.0	.0	.0	.0	1.9
1-2	.0	1.1	.9	.0	.0	.0	1.9	.0	.8	.0	.0	.0	.0	.8
3-6	.0	.4	1.1	.4	.0	.0	1.9	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.9	.0	.0	.0	.9	.0	.0	.2	.0	.0	.0	.2
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.9	.0	.0	.0	.9	.0	.0	.1	.0	.0	.0	.1
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.6	3.7	3.1	.4	.0	.0	7.8	1.0	1.7	.3	.0	.0	.0	3.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.4	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2
3-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4	.0	.0	.8
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.4	.0	.0	.0	.0	.4	.0	.2	.4	.4	.0	.0	1.0

PERIOD: (OVER-ALL) 1963-1977

DECEMBER

AREA 0028 VALPARAISO
34.55 72.8W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.3	1.1	.0	.0	.0	.0	1.4	.2	.9	.0	.0	.0	.0	1.1
1-2	.4	5.1	2.0	.0	.0	.0	7.5	.0	4.3	4.8	.0	.0	.0	9.1
3-4	.0	1.9	12.4	.0	.0	.0	14.3	.4	3.3	6.4	.0	.0	.0	10.1
5-6	.0	1.1	7.8	2.3	.0	.0	11.2	.0	.1	2.6	2.9	.0	.0	5.6
7	.0	.3	2.4	2.6	.0	.0	5.3	.0	.1	1.2	.6	.0	.0	1.9
8-9	.0	.3	.0	2.7	.0	.0	3.0	.0	.0	.0	.5	.0	.0	.6
10-11	.0	.0	.4	1.6	.0	.0	2.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.1	.0	.0	.1
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.7	9.8	25.0	9.5	.0	.0	49.0	.6	8.8	15.0	4.1	.0	.0	28.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.7	1.1	.0	.0	.0	.0	1.8	1.2	1.4	.0	.0	.0	.0	2.6	
1-2	.0	1.6	.4	.0	.0	.0	2.0	.4	.9	.4	.0	.0	.0	1.7	
3-4	.4	1.1	1.1	.0	.0	.0	2.6	.0	.1	.2	.0	.0	.0	.3	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.4	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	1.1	3.8	1.5	.0	.0	.0	6.4	1.6	2.4	1.1	.0	.0	.0	5.1	97.2

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	6.8	8.0	.0	.0	.0	.0	14.8	
1-2	.8	14.0	8.4	.0	.0	.0	23.2	
3-4	.8	6.8	21.2	.4	.0	.0	29.2	
5-6	.0	1.2	12.0	5.6	.0	.0	18.8	
7	.0	.4	4.0	3.2	.0	.0	7.6	
8-9	.0	.4	.0	3.2	.0	.0	4.0	
10-11	.0	.0	.4	1.6	.0	.0	2.0	
12	.0	.0	.0	.4	.0	.0	.4	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	8.4	30.8	46.4	14.4	.0	.0	100.0	250

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.7	5.3	8.9	5.0	1.1	1.9	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	88	4
6-7	.0	.8	7.5	8.6	6.1	5.5	2.5	1.1	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	119	6
8-9	.0	.0	2.5	3.6	7.8	2.5	4.4	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	77	7
10-11	.0	.8	1.4	1.1	3.9	1.1	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	33	6
12-13	.0	.0	.4	.8	.8	.3	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	26	5
>13	.0	.0	.0	.3	.8	.3	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	3
INDEX	1.1	.0	.6	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	3
TOTAL	10	25	91	72	75	42	29	8	9	0	0	0	0	0	0	0	0	0	0	361	6
PCT	2.8	6.9	25.2	19.9	20.8	11.6	8.0	2.2	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1905-1978
(OVER-ALL) 1855-1978

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AREA 0028 VALPARAISO
34.55 73.0W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	6.7	1.3	3.7	.0	.0	.0	.0	11.5	4.2	.4	6.5	.7	2.9	.0	73.8
NE	5.9	.9	2.9	.0	.0	.0	.0	9.4	2.8	.0	8.7	.0	3.8	.0	75.4
E	3.0	.0	2.7	.0	.0	.0	.0	5.7	.0	.6	9.4	.0	4.2	.0	80.1
SE	1.0	.0	.9	.0	.0	.0	.0	1.9	.4	1.0	6.1	.9	.9	.0	88.8
S	.2	.2	.7	.0	.0	.0	.0	1.1	.5	.2	2.9	.2	2.0	.0	93.1
SW	.4	.8	.7	.0	.0	.0	.0	2.0	.9	.*	5.0	.5	2.2	.0	89.3
W	.8	1.2	.5	.0	.0	.0	.0	2.5	2.8	.3	5.2	.6	2.3	.0	86.4
NW	3.5	1.4	5.3	.0	.0	.0	.0	9.8	3.0	.0	5.6	.4	1.3	.0	79.9
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.5	.0	1.6	.0	.0	.0	.2	2.3	.4	1.6	14.6	.3	3.4	.0	77.5
TOT PCT	2.0	.6	1.5	.0	.0	.0	*	4.1	1.4	.4	5.3	.3	2.3	.0	86.2
TOT OBS:	5467														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00003	2.1	.6	.9	.0	.0	.0	.0	3.6	.9	.1	4.7	.3	2.0	.0	88.4
06009	2.0	.5	1.4	.0	.0	.0	.0	3.9	1.6	1.0	4.9	.1	1.2	.0	87.2
12015	2.5	.6	2.4	.0	.0	.0	.1	5.3	1.9	.2	7.2	.7	2.9	.0	81.6
18021	1.5	.7	1.3	.0	.0	.0	.0	3.5	1.0	.0	6.0	.2	3.2	.0	86.1
TOT PCT TOT OBS:	2.0 5646	.6	1.5	.0	.0	.0	*	4.1	1.4	.4	5.7	.3	2.3	.0	85.9

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21
N	1.7	5.0	3.1	1.2	.3	*		11.3	10.1	10.9	10.6	10.2	9.6	10.9	12.1	13.5	11.4
NE	.9	1.8	.7	.2	.1	*		3.6	7.8	2.8	2.6	3.1	3.3	4.7	9.4	4.1	2.5
E	.6	1.0	.2	*	*	.0		1.8	6.2	1.3	1.2	1.4	2.2	2.5	2.9	1.9	1.2
SE	.9	3.0	2.6	1.1	.1	*		7.8	12.7	5.6	6.1	7.1	9.9	9.7	4.5	8.0	6.4
S	2.9	14.0	16.3	4.4	.5	*		38.2	12.7	38.1	39.4	41.7	42.5	40.1	30.8	33.0	36.9
SW	2.0	7.8	6.0	1.2	.1	*		17.1	10.6	21.0	26.1	17.3	13.2	13.4	26.5	16.9	20.6
W	1.2	2.9	1.2	.4	.1	*		5.7	8.9	6.0	2.4	4.8	4.8	4.3	3.6	7.3	6.8
NW	1.4	4.2	2.4	.7	.2	*		8.9	9.8	7.9	5.3	7.4	7.7	7.9	3.9	11.4	10.5
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	5.6							5.6	.0	6.3	6.2	6.9	6.7	6.5	6.3	4.0	3.8
TOT OBS							35142		10.9	5604	151	6112	4962	5362	213	6825	3913
TOT PCT	17.1	39.7	32.5	9.2	1.4	.1		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	4.2	4.4	1.9	.7	.1		11.3	10.1	10.9	9.9	11.0	12.8	
NE	1.9	1.2	.3	.1	*		3.6	7.8	2.8	3.2	4.9	3.6	
E	1.2	.5	.1	*	.0		1.8	6.2	1.3	1.8	2.5	1.7	
SE	2.3	3.1	1.9	.5	*		7.8	12.7	5.7	8.3	9.5	7.5	
S	8.7	17.8	10.0	1.6	.1		38.2	12.7	38.1	42.1	39.7	34.2	
SW	5.5	8.2	3.1	.4	*		17.1	10.6	21.2	15.5	13.9	18.1	
W	2.7	2.1	.6	.2	*		5.7	8.9	5.9	4.8	4.3	7.1	
NW	3.4	3.7	1.3	.4	.1		8.9	9.8	7.9	7.6	7.7	11.1	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	5.6						5.6	.0	6.3	6.8	6.5	3.9	
TOT OBS						35142		10.9	5755	11074	8575	12738	
TOT PCT	35.6	40.9	19.2	3.9	.4		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1905-1978
(OVER-ALL) 1855-1978

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	6.3	10.8	39.5	32.6	9.2	1.4	.2	11.0	100.0	5755
0600Z	6.8	12.0	40.7	30.8	8.4	1.2	.2	10.4	100.0	11074
1200Z	6.5	12.7	39.5	31.6	8.3	1.2	.1	10.4	100.0	5575
1800Z	3.9	10.8	39.0	34.3	10.2	1.6	.1	11.5	100.0	12738
TOT								10.9		35142
PCT	5.6	11.5	39.7	32.5	9.2	1.4	.1		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS) BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	1.2	1.1	2.3	6.4		6.1
NE	.4	.4	.9	1.9		6.3
E	.5	.2	.4	.8		5.4
SE	1.2	.6	.6	.8		4.3
S	22.0	5.5	7.2	7.3		3.2
SW	11.5	2.3	3.9	3.9		3.2
W	1.4	.7	1.4	1.6		4.8
NW	1.0	.8	1.8	2.4		5.5
VAR	.0	.0	.0	.0		4.0
CALM	1.7	.6	.0	2.4		4.8
TOT OBS					3971	4.1
TOT PCT	41.0	12.1	19.4	27.5	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8) AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.4	.1	.8	1.8	3.0	1.2	.4	.1	.1	.1	3.1	
NE	.2	.1	.2	.3	.9	.4	.1	.0	.0	.0	1.3	
E	.0	.0	.1	.1	.3	.2	.0	.0	.1	.2	.8	
SE	.1	.0	.1	.2	.4	.2	.0	.0	.0	.1	2.1	
S	.5	.1	.6	2.3	4.4	2.5	.5	.2	.1	.4	30.5	
SW	.4	.0	.3	1.2	2.6	1.1	.3	.1	.1	.1	15.3	
W	.1	.0	.1	.3	1.1	.4	.1	.1	.0	.1	2.7	
NW	.2	.1	.1	.5	1.4	.8	.1	.1	.0	.1	2.6	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.6	.0	.3	.4	.8	.7	.2	.1	.0	.1	2.6	
TOT OBS	2.6	.4	2.6	7.2	14.9	7.4	1.8	.5	.4	1.2	61.1	3971
TOT PCT												100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5
>5000	1.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1
>3500	2.4	3.6	3.9	3.9	3.9	3.9	3.9	3.9
>2000	7.7	10.8	11.2	11.2	11.3	11.3	11.3	11.3
>1000	17.5	24.7	25.9	26.0	26.1	26.2	26.3	26.3
>600	21.4	31.1	33.0	33.2	33.4	33.5	33.6	33.6
>300	22.3	32.9	35.4	35.7	35.8	36.0	36.1	36.2
>150	22.4	33.2	35.7	36.1	36.2	36.4	36.5	36.5
>0	22.6	33.5	36.6	37.2	37.8	38.1	38.8	39.1

TOTAL NUMBER OF OBS: 4050

PCT FREQ NH <5/8: 60.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
27.1	12.6	9.1	7.0	4.9	3.7	5.2	6.5	21.8	2.1	4257

PERIOD: (PRIMARY) 1905-1978
(OVER-ALL) 1855-1978

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	*	.0	.0	.0	.0	*	.0	.0	.0	*	
	NO PCP	.2	.1	.1	*	.4	.3	.1	.1	.0	.5	1.9	
	TOT %	.2	.1	.1	*	.4	.3	.1	.1	.0	.5	1.9	
1/2<1	PCP	.1	*	.0	.0	.0	.0	*	.0	.0	.0	.1	
	NO PCP	*	*	*	.1	.2	.1	*	*	.0	.2	.7	
	TOT %	.1	.1	*	.1	.2	.1	*	*	.0	.2	.8	
1<2	PCP	.1	*	*	*	*	*	*	.1	.0	.0	.3	
	NO PCP	.1	.1	*	.1	.1	.1	.1	.1	.0	.1	.8	
	TOT %	.2	.1	.1	.1	.2	.1	.1	.1	.0	.1	1.1	
2<5	PCP	.5	.1	*	*	.1	*	.0	.1	.0	.0	.9	
	NO PCP	.5	.1	.1	.1	.6	.5	.2	.2	.0	.3	2.6	
	TOT %	1.0	.2	.1	.1	.7	.5	.2	.3	.0	.3	3.5	
5<10	PCP	.7	.2	.1	*	.1	.2	.1	.4	.0	.1	2.0	
	NO PCP	3.4	1.4	.6	1.1	6.6	3.7	1.0	1.5	.0	1.4	20.7	
	TOT %	4.1	1.6	.7	1.2	6.8	3.9	1.1	1.8	.0	1.5	22.6	
10+	PCP	.2	.1	*	*	.1	*	*	.1	.0	.1	.7	
	NO PCP	5.3	2.5	1.2	2.3	31.4	16.3	3.6	3.5	.0	3.3	69.4	
	TOT %	5.5	2.6	1.2	2.3	31.5	16.3	3.6	3.6	.0	3.4	70.0	
TOT OBS													5655
TOT PCT		11.2	4.7	2.3	3.7	39.7	21.4	5.1	6.0	.0	6.0	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.1	.1	.0	*	.1	.2	*	.1	.0	.5	.9	
	4-10	.1	*	*	*	.2	.1	*	.0	.0	.0	.9	
	11-21	*	*	.0	.0	.2	.1	*	.0	.0	.0	.4	
	22+	*	*	.0	.0	*	*	.0	*	.0	.0	.1	
	TOT %	.2	.2	*	*	.6	.4	.1	.1	.0	.5	2.2	
1/2<1	0-3	*	*	*	*	*	*	.0	.0	.0	.2	.2	
	4-10	*	*	*	*	.1	*	*	*	.0	.0	.2	
	11-21	*	.0	.0	*	.1	.1	.0	*	.0	.0	.2	
	22+	*	.0	.0	.0	.0	.0	.0	*	.0	.0	*	
	TOT %	.1	*	*	*	.1	.1	*	*	.0	.2	.7	
1<2	0-3	*	*	.0	.0	*	*	.0	.0	.0	.2	.2	
	4-10	.1	*	*	*	.1	.1	.1	.1	.0	.0	.5	
	11-21	.2	*	.0	*	.1	*	*	*	.0	.0	.4	
	22+	.1	*	.0	.0	*	.0	.0	*	.0	.0	.2	
	TOT %	.4	.1	*	.1	.3	.1	.1	.1	.0	.2	1.3	
2<5	0-3	.1	*	*	*	.1	.2	.1	.1	.0	.4	1.0	
	4-10	.4	.1	.1	.1	.4	.4	.1	.1	.0	.0	1.6	
	11-21	.3	.1	.0	*	.3	.1	*	.2	.0	.0	1.0	
	22+	.4	.1	*	.0	*	*	*	.1	.0	.0	.6	
	TOT %	1.1	.2	.1	.1	.9	.7	.2	.5	.0	.4	4.2	
5<10	0-3	.3	.3	.2	.2	.6	.6	.2	.3	.0	1.7	4.3	
	4-10	1.4	.7	.3	.5	2.4	1.5	.6	.7	.0	.0	8.2	
	11-21	1.3	.3	*	.1	2.6	1.7	.1	.4	.0	.0	6.6	
	22+	.7	.1	*	*	.8	.2	.1	.2	.0	.0	2.1	
	TOT %	3.7	1.4	.6	.9	6.4	4.1	1.0	1.6	.0	1.7	21.2	
10+	0-3	.6	.5	.3	.4	1.5	1.2	.6	.4	.0	4.0	9.4	
	4-10	2.6	1.3	.7	1.3	9.9	7.0	2.1	2.1	.0	.0	27.0	
	11-21	2.0	.5	.1	.5	13.7	7.3	.7	.9	.0	.0	27.8	
	22+	.2	.1	*	.1	4.2	1.5	.1	.1	.0	.0	6.2	
	TOT %	5.3	2.4	1.1	2.4	31.2	17.0	3.4	3.5	.0	4.0	70.3	
TOT OBS													8263
TOT PCT		10.9	4.2	1.9	3.6	39.5	22.5	4.8	5.9	.0	6.9	100.0	

PERIOD: (PRIMARY) 1905-1978
(OVER-ALL) 1855-1978

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY MGT	TOTAL OBS
00603	2.1	.5	2.1	5.5	12.5	7.6	1.2	.4	.4	1.6	34.0	66.0	1001
06609	2.4	.0	2.1	6.8	14.6	6.8	1.8	.7	.2	1.3	36.8	63.2	1147
12615	3.2	.7	3.1	8.9	18.3	7.5	2.0	.4	.5	.8	45.2	54.8	1039
18621	2.6	.3	2.8	7.1	12.7	6.9	2.0	.6	.3	.9	36.2	63.8	982
TOT													4169
PCT	2.6	.4	2.5	7.1	14.6	7.2	1.8	.5	.4	1.1	38.1	61.9	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00603	1.5	.6	1.1	3.3	20.3	73.2	1810
06609	2.0	.7	.9	4.7	21.4	70.4	2710
12615	3.6	1.1	2.1	4.5	21.7	67.0	1832
18621	2.0	.7	1.6	4.3	22.3	69.1	2097
TOT							8449
PCT	2.2	.7	1.4	4.3	21.5	69.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING MGT (FEET, NM >4/8) BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00603	2.2	5.7	12.7	23.3	64.1	968
06609	2.5	5.0	13.7	24.7	61.6	1122
12615	3.3	8.3	20.3	27.7	52.0	1009
18621	2.7	6.6	15.9	22.8	61.3	951
TOT						4050
PCT	2.7	6.4	15.6	24.7	59.7	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
75/79	.0	.0	*	*	*	.0	.0	.0	.1	
70/74	.0	.0	.1	.1	.3	.3	.2	.3	1.3	
65/69	.0	*	.1	.2	.9	2.0	2.0	1.3	6.5	
60/64	.0	.0	*	.3	2.0	6.4	10.4	4.7	23.8	
55/59	.0	.0	*	.3	2.6	9.2	19.0	11.2	42.4	
50/54	.0	.0	*	.3	2.0	4.3	10.6	7.0	24.3	
45/49	.0	.0	.0	.1	.1	.0	.6	.3	1.7	
40/44	.0	.0	.0	.0	.0	.0	.1	.0	.1	
TOTAL									5296	100.0
PCT	.0	*	.3	1.4	7.9	22.8	42.9	24.7		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
.1	.1	.1	.1	.3	.3	.1	.1	.0	.0
.5	.3	.2	.3	2.5	1.4	.4	.5	.0	.3
2.4	1.1	.5	.7	9.4	5.4	1.3	1.7	.0	1.3
5.8	2.1	.8	1.7	16.7	8.2	2.0	2.3	.0	2.8
2.5	1.6	.5	1.1	9.1	5.0	1.2	1.3	.0	1.9
.1	.1	.0	.2	.5	.4	.1	.0	.0	.2
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11.3	5.3	2.2	4.2	38.7	20.9	5.1	5.8	.0	6.5

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00603	77	65	63	57	52	50	43	57.2	3728
06609	70	63	61	56	51	49	40	55.8	11126
12615	78	64	62	57	51	49	41	56.5	5467
18621	80	68	65	59	54	51	41	58.9	11632
TOT	80	67	63	57	52	50	40	57.2	33953

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00603	.0	1.4	7.5	20.6	45.5	24.8	63	1287
06609	.0	.6	5.5	18.4	45.7	29.8	65	1505
12615	.0	.5	6.7	20.8	44.1	27.8	64	1374
18621	.0	4.4	11.9	30.4	36.6	16.7	80	1393
TOT	0	92	427	1251	2396	1393	83	5559

PERIOD: (PRIMARY) 1905-1978
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41 44	45 48	49 52	53 56	57 60	61 64	65 68	69 72	73 76	77 80	TOT	N FOG	WD FOG
20/27	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	1	.0	*
17/19	.0	.0	.0	.0	.0	*	.0	.0	.1	.0	4	.0	.1
14/16	.0	.0	.0	.0	.0	*	.1	.1	.0	.0	12	.0	.2
11/13	.0	.0	.0	.0	*	.2	.3	.1	.1	.0	35	*	.7
9/10	.0	.0	.0	*	.1	.4	.4	.1	*	.0	55	*	1.1
7/8	.0	.0	.0	*	.6	.8	.3	.2	.0	.0	99	.1	1.9
6	.0	.0	.0	.1	.5	.9	.4	.1	.0	.0	102	*	2.0
5	.0	.0	.0	.2	1.5	1.2	.5	.1	*	.0	167	.1	3.3
4	.0	.0	*	.7	1.6	1.6	.3	.1	*	.0	210	.3	4.0
3	.0	.0	.0	.9	3.2	1.1	.5	*	.0	.0	273	.3	5.4
2	.0	.0	.2	2.8	3.6	2.3	.6	.1	.0	.0	453	.6	9.1
1	.0	*	.2	4.9	4.3	2.3	.6	.1	*	.0	602	.3	12.3
0	.0	.0	.8	6.3	4.7	2.3	.9	*	*	.0	719	.8	14.5
-1	.0	*	1.3	5.7	4.1	2.0	.5	.0	.0	.0	640	.7	13.0
-2	.0	*	1.6	4.8	2.8	1.0	.4	*	.0	.0	496	.4	10.3
-3	.0	.1	1.6	3.3	1.8	.7	.1	.0	.0	.0	351	.6	6.9
-4	.0	.1	1.4	2.0	1.1	.3	.1	.0	.0	.0	223	.3	4.6
-5	.0	.3	1.1	1.0	.8	.2	.1	.0	.0	.0	162	.3	3.3
-6	.0	.1	.5	.4	.3	.1	*	.0	.0	.0	65	.1	1.3
-7/-8	*	.1	.4	.2	.1	*	*	.0	.0	.0	35	*	.7
-9/-10	.0	*	.0	.1	.1	*	.0	.0	.0	.0	10	.1	.2
-11/-12	.0	*	.0	*	.0	.0	.0	.0	.0	.0	2	.0	*
-14/-16	.0	.0	*	.0	.0	.0	.0	.0	.0	.0	1	.0	*
TOTAL											4727		
PCT	*	.8	9.1	33.5	31.1	18.1	6.0	1.1	.3	*	100.0	5.0	95.0

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							PCT	NE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.1	.7	.1	.0	.0	.0	.9	.4	.3	.1	.0	.0	.0	.0	.7	.7
1-2	.3	2.3	.9	.0	.0	.0	3.4	.2	.8	.2	.0	.0	.0	.0	1.2	1.2
3-4	.1	1.1	1.7	.1	.0	.0	3.0	*	.4	.5	.0	.0	.0	.0	1.0	1.0
5-6	.0	.2	1.7	.2	.0	.0	2.0	.0	*	.2	*	.0	.0	.0	.2	.2
7	*	.1	.4	.1	.0	*	.9	.0	*	.0	*	.0	.0	.0	*	*
8-9	.0	.0	.2	.4	.1	.0	.7	.0	.0	.1	.1	.1	.0	.0	.2	.2
10-11	.0	.0	.2	.1	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.1	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.1	.2	.0	.3	.0	.0	.0	.0	.0	*	.0	*	*
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	4.4	5.3	1.1	.3	*	11.7	.6	1.5	1.1	.1	.1	.1	.0	3.3	3.3

HGT	E							PCT	SE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.1	.3	.0	.0	.0	.0	.4	.2	.2	*	.0	.0	.0	.0	.4	.4
1-2	*	.2	.1	.0	.0	.0	.4	.1	.6	.1	.0	.0	.0	.0	.8	.8
3-4	.0	.2	*	.0	.0	.0	.2	.1	.2	.2	*	.0	.0	.0	.5	.5
5-6	.0	.0	.1	.0	.0	.0	.1	.0	.1	.3	.1	.0	.0	.0	.5	.5
7	*	.0	.0	.0	.0	.0	*	.0	.0	*	*	.0	.0	.0	.1	.1
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	.1	.0	.0	.0	.1	.1
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.1	.1
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	*	.0	*	*
17-19	.0	.1	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.1	.7	.2	.0	.0	.0	1.1	.3	1.1	.8	.3	.3	*	.0	2.5	2.5

PERIOD: (OVER-ALL) 1963-1978

ANNUAL

AREA 0028 VALPARAISO
34.5S 73.0W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.3	1.5	.1	.0	.0	.0	1.9	.7	1.0	.1	.0	.0	.0	1.8
1-2	.5	4.9	3.5	.0	.0	.0	8.9	.4	3.3	2.5	.0	.0	.0	6.1
3-4	.1	3.9	8.4	.7	.0	.0	13.1	.*	2.3	3.9	.3	.0	.0	6.5
5-6	.1	1.1	6.4	1.4	.0	.0	9.0	.1	.9	2.1	.7	.0	.0	3.8
7	.0	.4	3.3	1.9	.1	.0	5.7	.0	.2	1.3	.5	.1	.0	2.1
8-9	.0	.1	.9	1.7	.2	.0	2.8	.*	.1	.5	.2	.*	.0	.8
10-11	.0	.0	.5	.8	.1	.0	1.5	.0	.0	.1	.1	.*	.0	.2
12	.0	.0	.1	.3	.2	.0	.6	.0	.1	.0	.*	.*	.0	.1
13-16	.0	.0	.1	.6	.1	.0	.8	.0	.0	.*	.1	.*	.0	.1
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.0	11.9	23.3	7.5	.7	.0	44.3	1.2	7.8	10.5	2.0	.1	.0	21.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.5	.5	.0	.0	.0	.0	1.0	.4	.4	.*	.0	.0	.0	.9	
1-2	.2	1.5	.4	.0	.0	.0	2.1	.2	1.4	.7	.0	.0	.0	2.3	
3-4	.2	.8	.3	.0	.0	.0	1.2	.*	.6	.7	.0	.0	.0	1.3	
5-6	.*	.2	.2	.1	.0	.0	.6	.*	.2	.4	.1	.0	.0	.7	
7	.*	.1	.1	.0	.0	.0	.2	.*	.1	.3	.*	.0	.*	.4	
8-9	.0	.0	.0	.*	.0	.0	.*	.0	.0	.1	.1	.0	.0	.2	
10-11	.0	.0	.0	.*	.0	.0	.*	.0	.0	.0	.0	.0	.0	.*	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.9	3.0	1.1	.2	.0	.0	5.2	.7	2.6	2.2	.3	.0	.*	5.8	95.5

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	7.6	4.8	.4	.0	.0	.0	12.8	
1-2	2.2	14.9	8.3	.0	.0	.0	25.4	
3-4	.5	9.3	15.6	1.1	.0	.0	26.5	
5-6	.3	2.6	11.2	2.6	.0	.0	16.7	
7	.1	.8	5.5	2.6	.1	.*	9.1	
8-9	.*	.2	1.8	2.6	.3	.0	4.9	
10-11	.0	.0	.8	1.2	.2	.0	2.2	
12	.0	.*	.1	.4	.3	.0	.9	
13-16	.0	.0	.1	.8	.3	.0	1.2	
17-19	.0	.1	.0	.0	.*	.0	.1	
20-22	.0	.0	.0	.0	.*	.0	.*	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	10.8	32.8	43.9	11.3	1.2	.*	100.0	2273

PERIOD: (OVER-ALL) 1951-1976

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.6	6.2	9.1	5.2	2.5	1.9	.8	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1021
6-7	.1	.8	5.3	8.7	5.8	3.5	2.1	.9	.2	.*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1033
8-9	.1	.7	2.1	3.2	4.7	3.2	2.2	1.1	1.3	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	676
10-11	.0	.7	1.0	1.6	2.0	1.5	1.5	.8	.7	.3	.*	.0	.0	.0	.0	.0	.0	.0	.0	.0	366
12-13	.0	.0	1.0	.6	.5	.5	.4	.4	.5	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	144
>13	.0	.0	.*	.6	.3	.7	.4	.1	.4	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	98
INDET	2.9	1.0	1.1	.8	.7	.6	.6	.1	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	282
TOTAL																					3620
PCT	4.6	9.3	19.8	20.9	16.4	11.9	8.0	3.7	4.2	1.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1905-1978
(OVER-ALL) 1855-1978

TABLE 20

AREA 0028 VALPARAISO
34.55 73.0W

PERCENT FREQUENCY OF OCCURRENCE OF SEA TEMP (DEG F) BY MONTH

SEA TMP DEG F	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	PCT
96+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
95/96	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
93/94	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
91/92	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
89/90	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
87/88	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
85/86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
83/84	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
81/82	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
79/80	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
77/78	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
75/76	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
73/74	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	5	.0
71/72	.1	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.1	15	.0
69/70	.7	.5	.4	.2	.0	.0	.0	.0	.0	.0	.0	.1	49	.1
67/68	2.1	3.4	4.6	.7	.1	.0	.0	.0	.0	.0	.0	.0	308	.9
65/66	5.9	9.6	8.4	2.0	.4	.0	.2	.1	.0	.0	.1	1.5	752	2.2
63/64	18.8	18.3	15.5	8.1	2.8	.6	.1	.0	.0	.0	1.1	8.2	1961	5.8
61/62	21.1	15.0	15.6	11.8	10.6	2.4	1.0	.1	.0	.8	5.5	19.4	2805	8.3
59/60	17.5	16.8	17.6	20.2	18.8	11.9	6.0	1.9	1.3	5.0	16.7	26.7	4424	13.1
57/58	15.1	16.8	15.8	18.6	24.0	24.8	17.5	8.5	10.1	17.1	26.3	20.0	6044	17.8
55/56	11.7	12.4	14.5	22.0	24.7	33.2	33.0	30.1	31.6	38.7	27.7	14.8	8450	24.9
53/54	5.6	5.4	6.3	12.2	14.0	19.1	29.2	37.6	39.6	28.1	15.4	6.7	6367	18.8
51/52	1.4	1.5	1.1	3.4	3.6	6.1	10.5	17.2	14.6	8.9	6.1	1.7	2214	6.5
49/50	.0	.0	.2	.5	.3	1.7	2.1	3.5	2.4	1.2	.9	.4	405	1.2
47/48	.0	.0	.0	.1	.1	.2	.3	.7	.3	.3	.1	.0	64	.2
45/46	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.1	.0	12	.0
43/44	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
41/42	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
39/40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
37/38	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
35/36	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
33/34	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
31/32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
29/30	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
27/28	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
<27	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
TOTAL	2624	2374	2987	2575	2916	2907	3214	2823	3043	2908	2723	2784	33878	100.0
MEAN	60.0	60.1	59.9	57.9	57.1	55.9	55.0	54.0	54.2	55.0	56.5	58.7	57.0	

TABLE 21

PRESSURE (MB)

AVERAGE BY HOUR (GMT)

MO	0000	0300	0600	0900	1200	1500	1800	2100	MEAN	TOTAL OBS
JAN	1015	1016	1015	1015	1015	1016	1016	1015	1015	1247
FEB	1015	1015	1014	1014	1015	1015	1016	1015	1015	927
MAR	1016	1017	1015	1015	1015	1017	1016	1016	1016	1207
APR	1017	1016	1016	1016	1016	1016	1017	1016	1017	1263
MAY	1017	1016	1017	1018	1018	1020	1017	1018	1017	1158
JUN	1018	1016	1018	1017	1017	1019	1017	1017	1017	1338
JUL	1018	1018	1018	1017	1018	1020	1018	1017	1018	1637
AUG	1019	1021	1019	1019	1019	1019	1019	1019	1019	1341
SEP	1019	1020	1019	1018	1019	1018	1019	1019	1019	1484
OCT	1019	1018	1018	1018	1019	1020	1019	1019	1019	1281
NOV	1018	1020	1018	1017	1018	1018	1018	1018	1018	1214
DEC	1016	1014	1015	1015	1016	1015	1017	1016	1016	1381
ANN	1017	1017	1017	1017	1017	1018	1017	1017	1017	15478
OBS	2436	148	2592	1460	2504	205	4880	1253		

PERCENTILES

MO	MIN	1%	5%	25%	50%	75%	95%	99%	MAX
JAN	1005	1008	1010	1013	1015	1017	1021	1023	1030
FEB	1005	1008	1010	1013	1015	1017	1020	1024	1026
MAR	1005	1008	1010	1014	1016	1018	1021	1023	1028
APR	1002	1009	1012	1015	1016	1018	1022	1025	1028
MAY	1001	1006	1010	1015	1017	1020	1024	1026	1034
JUN	1000	1005	1008	1014	1017	1021	1024	1029	1033
JUL	998	1004	1008	1013	1018	1021	1025	1028	1035
AUG	998	1005	1010	1016	1019	1023	1027	1030	1035
SEP	1006	1010	1012	1017	1019	1022	1026	1029	1032
OCT	1005	1009	1013	1017	1019	1021	1025	1028	1032
NOV	1007	1010	1013	1016	1018	1020	1024	1027	1031
DEC	1005	1007	1011	1014	1016	1018	1022	1024	1033

PERIOD: (PRIMARY) 1910-1978
(OVER-ALL) 1870-1978

JANUARY

AREA 0029 COQUIMBO
28.55 71.9W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
N	.0	.0	3.6	.0	.0	.0	.0	3.6	.0	.0	.0	.0	3.6	.0	92.8
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11.4	.0	.0	.0	88.6
E	.0	.0	30.8	.0	.0	.0	.0	30.8	.0	.0	.0	.0	.0	.0	69.2
SE	.0	.0	.0	.0	.0	.0	.0	.0	2.5	.0	.0	.0	2.5	.0	95.0
S	.0	.2	.7	.0	.0	.0	.2	1.1	.6	.4	1.1	.0	.7	.0	96.1
SW	.6	.0	.2	.0	.0	.0	.0	.8	.0	.6	1.2	.0	1.7	.0	95.7
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	10.7	.0	.0	2.7	.0	86.7
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	4.7	.0	2.3	.0	4.7	.0	88.4
TOT PCT	.1	.1	.7	.0	.0	.0	.1	1.1	.7	.6	1.2	.0	1.3	.0	95.2
TOT OBS:	848														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG BLWG SNOW	DUST NO SIG WEA
00603	.5	.0	.5	.0	.0	.0	.0	.9	.9	.5	.5	.0	1.8	.0	95.4
06609	.0	.0	1.4	.0	.0	.0	.0	1.4	.5	2.4	.5	.0	.5	.0	94.7
12615	.0	.5	.9	.0	.0	.0	.0	1.4	1.4	.0	3.2	.0	2.3	.0	91.9
18621	.0	.0	.5	.0	.0	.0	.5	1.0	.0	.0	.5	.0	.5	.0	98.1
TOT PCT	.1	.1	.8	.0	.0	.0	.1	1.2	.7	.7	1.2	.0	1.3	.0	95.0
TOT OBS:	856														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21
N	1.5	1.7	.2	.0	.0	.0		3.5	5.1	1.5	.0	3.2	3.6	5.4	.0	4.1	2.8
NE	.4	.8	.1	.0	.0	.0		1.2	5.4	.2	.0	.7	.9	3.8	.0	1.3	.3
E	.7	.8	.1	.0	.0	.0		1.6	4.8	.6	.0	.9	3.5	2.6	.0	1.4	.7
SE	1.3	3.9	3.7	.5	.0	.0		9.4	10.4	7.5	6.3	9.3	10.4	11.5	6.5	9.6	8.1
S	6.2	26.3	21.4	3.1	.0	.0		57.0	10.6	64.2	70.0	60.1	52.4	51.9	57.3	54.0	59.5
SW	2.8	9.6	4.4	.3	.0	.0		17.1	8.4	19.4	13.8	16.5	17.1	14.3	16.9	16.9	19.7
W	.8	1.4	.1	.0	.0	.0		2.4	5.0	2.3	.0	1.7	1.9	1.0	5.6	3.1	4.8
NW	.8	1.2	.0	.0	.0	.0		2.0	4.9	.8	.0	1.7	1.6	2.5	4.0	2.7	2.0
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	5.9							5.9	.0	3.6	10.0	5.8	8.5	7.0	9.7	7.0	2.0
TOT OBS	609	1369	900	117	3	0	2998		9.0	533	20	504	364	513	31	729	304
TOT PCT	20.3	45.7	30.0	3.9	.1	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	2.6	.8	.1	.0	.0	3.5	5.1	1.4	3.4	5.1	3.7		
NE	.9	.4	.0	.0	.0	1.2	5.4	.2	.8	3.5	1.0		
E	1.2	.4	.0	.0	.0	1.6	4.8	.6	2.0	2.4	1.2		
SE	3.1	4.6	1.5	.2	.0	9.4	10.4	7.5	9.8	11.2	9.1		
S	17.4	28.6	10.4	.5	.0	57.0	10.6	64.4	56.9	52.2	55.6		
SW	8.1	7.4	1.6	.1	.0	17.1	8.4	19.2	16.8	14.5	17.7		
W	1.9	.4	.1	.0	.0	2.4	5.0	2.2	1.8	1.2	3.6		
NW	1.6	.4	.0	.0	.0	2.0	4.9	.7	1.7	2.6	2.5		
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
CALM	5.9					5.9	.0	3.8	6.9	7.2	5.5		
TOT OBS	1280	1287	408	23	0	2998	9.0	533	868	544	1033		
TOT PCT	42.7	42.9	13.6	.8	.0		100.0	100.0	100.0	100.0	100.0		

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PERIOD: (PRIMARY) 1910-1978
(OVER-ALL) 1870-1978

AREA 0029 COQUIMBO
28.55 71.9W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)						48+	MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47					
0000Z	3.8	9.4	44.5	35.4	6.5	.4	.0	10.5	100.0		553
0600Z	6.9	11.5	45.7	32.4	3.5	.0	.0	9.2	100.0		868
1200Z	7.2	18.0	47.1	24.8	2.9	.0	.0	7.9	100.0		544
1800Z	5.5	17.6	45.5	27.9	3.4	.1	.0	8.6	100.0		1033
TOT	177	432	1309	900	117	3	0	9.0			2998
PCT	5.9	14.4	45.7	30.0	3.9	.1	.0		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8-10 OBS	TOTAL OBS	MEAN CLOUD COVER
N	.3	.0	.6	1.0		6.2
NE	.2	.2	.1	.5		5.8
E	.0	.0	.2	.1		6.8
SE	.4	.7	2.1	2.1		6.2
S	13.4	7.6	19.1	23.5		5.4
SW	4.9	2.0	4.1	7.9		5.3
W	.2	.2	1.4	.3		5.9
NW	.5	.3	.0	.8		4.9
VAR	.0	.0	.0	.0		.0
CALM	1.7	.2	.9	2.6		5.1
TOT OBS	140	72	185	252	649	5.5
TOT PCT	21.6	11.1	28.5	38.8	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NM >4/8)
AND OCCURRENCE OF NM <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NM <5/8 ANY HGT	TOTAL OBS
N	.0	.0	.0	.1	1.0	.0	.2	.0	.2	.0	.5	
NE	.0	.0	.2	.2	.3	.0	.1	.0	.0	.0	.3	
E	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2	
SE	.0	.0	.2	.3	1.8	1.1	.3	.2	.0	.0	1.4	
S	.2	.2	1.0	7.1	17.9	8.4	3.0	1.5	.3	.5	23.8	
SW	.0	.2	.3	2.3	5.0	1.5	1.1	.0	*	.1	8.2	
W	.0	.0	.1	.0	.8	.2	.0	.2	.0	.2	.7	
NW	.0	.0	.2	*	.4	.0	.0	.0	.2	.0	.8	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.5	.0	1.5	.9	.2	.2	.0	.0	2.2	
TOT OBS	1	1	16	65	187	78	32	13	4	5	247	649
TOT PCT	.2	.2	2.5	10.0	28.8	12.0	4.9	2.0	.6	.8	38.1	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NM >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >4500	1.2	1.4	1.4	1.4	1.4	1.4	1.4	1.4
= OR >3000	2.9	3.4	3.4	3.4	3.4	3.4	3.4	3.4
= OR >2500	6.9	8.3	8.3	8.3	8.3	8.3	8.3	8.3
= OR >2000	14.7	19.9	20.4	20.4	20.4	20.4	20.4	20.4
= OR >1500	40.7	48.5	49.3	49.3	49.3	49.3	49.3	49.3
= OR >1000	49.2	58.2	59.3	59.3	59.3	59.3	59.3	59.3
= OR >600	50.7	60.5	61.7	61.7	61.7	61.7	61.7	61.7
= OR >300	50.7	60.5	61.7	61.7	61.7	61.7	61.7	61.7
= OR >150	50.7	60.5	61.7	61.7	61.7	61.7	61.7	61.7
= OR >0	50.7	60.5	61.7	61.7	61.7	61.7	61.7	61.7
TOTAL	331	397	405	405	405	405	405	405

TOTAL NUMBER OF OBS: 699

PCT FREQ NM <5/8: 38.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
10.9	7.9	6.8	5.1	6.8	4.8	9.9	14.2	33.3	.1	705

PERIOD: (PRIMARY) 1910-1976
(OVER-ALL) 1870-1978

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VISBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	TOT %	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	.2
	TOT %	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	.2
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.1	.1	.0	.0	.0	.0	.1	.4	.4
	TOT %	.0	.0	.0	.1	.1	.0	.0	.0	.0	.1	.4	.4
2<5	PCP	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	NO PCP	.1	.1	.0	.4	1.0	.2	.0	.0	.0	.4	2.1	2.1
	TOT %	.1	.1	.0	.4	1.1	.2	.0	.0	.0	.4	2.2	2.2
5<10	PCP	.1	.0	.0	.0	.4	.0	.0	.0	.0	.0	.6	.6
	NO PCP	.5	.2	.0	.5	9.3	2.9	1.0	.5	.0	1.2	16.2	16.2
	TOT %	.6	.2	.0	.5	9.7	2.9	1.0	.5	.0	1.2	16.8	16.8
10+	PCP	.0	.0	.1	.0	.1	.1	.0	.0	.0	.0	.4	.4
	NO PCP	2.5	.7	.3	3.7	51.0	15.7	1.2	1.4	.0	3.4	79.9	79.9
	TOT %	2.5	.7	.4	3.7	51.1	15.9	1.2	1.4	.0	3.4	80.3	80.3
TOT OBS													847
TOT PCT		3.3	1.0	.4	4.8	62.4	18.9	2.2	1.9	.0	5.1	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VISBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
1/2<1	0-3	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	.2
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1
	4-10	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.3	.3
	11-21	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.1	.2	.0	.0	.0	.0	.1	.5	.5
2<5	0-3	.1	.0	.0	.0	.0	.0	.1	.0	.0	.4	.6	.6
	4-10	.0	.1	.0	.0	.6	.5	.0	.0	.0	.0	1.2	1.2
	11-21	.0	.0	.0	.3	.4	.0	.0	.0	.0	.0	.7	.7
	22+	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	TOT %	.1	.1	.0	.3	1.2	.5	.1	.0	.0	.4	2.6	2.6
5<10	0-3	.3	.0	.0	.0	1.0	.4	.3	.1	.0	1.6	3.7	3.7
	4-10	.4	.3	.0	.4	4.8	2.3	.6	.3	.0	.0	9.2	9.2
	11-21	.0	.0	.0	.2	3.5	.8	.1	.0	.0	.0	4.6	4.6
	22+	.0	.0	.0	.0	.8	.1	.0	.0	.0	.0	.8	.8
	TOT %	.7	.3	.0	.6	10.1	3.6	1.0	.4	.0	1.6	18.4	18.4
10+	0-3	1.0	.2	.2	.1	2.6	1.6	.2	.5	.0	3.5	9.8	9.8
	4-10	1.5	.6	.4	1.4	18.5	10.4	.7	.7	.0	.0	34.2	34.2
	11-21	.1	.1	.1	1.9	22.4	5.5	.2	.0	.0	.0	30.3	30.3
	22+	.0	.0	.0	.2	3.5	.4	.0	.0	.0	.0	4.0	4.0
	TOT %	2.6	.9	.6	3.6	47.1	17.8	1.0	1.2	.0	3.5	78.3	78.3
TOT OBS													1077
TOT PCT		3.5	1.2	.6	4.6	58.8	21.9	2.2	1.7	.0	5.6	100.0	

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PERIOD: (PRIMARY) 1910-1978
(OVER-ALL) 1870-1978AREA 0029 COQUIMBO
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <3/8 ANY MGT	TOTAL OBS
00003	.0	.0	2.2	9.8	28.3	11.4	3.3	1.6	.5	.5	57.6	42.4	184
06009	.0	.0	2.1	7.0	27.3	13.3	4.9	1.4	.0	.7	56.6	43.4	143
12015	.6	.6	3.4	13.6	34.1	11.4	5.7	2.3	.6	.0	72.2	27.8	176
18021	.0	.0	1.8	7.8	22.8	11.4	5.4	2.4	1.2	1.8	54.5	45.5	167
TOT	1	1	16	65	189	79	32	13	4	5	405	265	670
PCT	.1	.1	2.4	9.7	28.2	11.6	4.8	1.9	.6	.7	60.4	39.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.4	2.3	15.4	81.5	239
06009	.3	.0	.0	1.0	21.5	77.2	289
12015	.0	.8	.8	3.4	19.9	75.1	261
18021	.0	.0	.7	3.6	16.7	79.0	276
TOT	1	2	5	28	201	846	1085
PCT	.1	.2	.5	2.6	18.5	78.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOUR (GMT)	<150 <50VD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.0	2.2	13.3	46.1	40.6	180
06009	.0	2.2	10.9	48.9	40.1	137
12015	.6	4.6	19.7	53.8	26.6	173
18021	.0	1.8	11.0	45.4	43.6	163
TOT	1	18	91	317	245	653
PCT	.2	2.8	13.9	48.5	37.5	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
80/84	.0	.0	.0	.3	.0	.0	.0	.0	2	.3
75/79	.0	.0	.0	.3	.6	.3	.0	.0	8	1.1
70/74	.0	.0	.1	.3	2.5	2.7	.8	.3	48	6.6
65/69	.0	.0	.0	.3	4.0	16.3	14.1	6.5	291	41.2
60/64	.0	.0	.0	.3	1.6	12.0	20.2	13.7	338	47.8
55/59	.0	.0	.0	.0	.1	.3	1.0	1.4	20	2.8
TOTAL	0	0	1	10	62	223	256	155	707	100.0
PCT	.0	.0	.1	1.4	8.8	31.5	36.2	21.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
80/84	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0
75/79	.0	.0	.0	.0	.5	.5	.0	.1	.0	.0
70/74	.3	.2	.2	.2	2.8	1.8	.6	.1	.0	.6
65/69	.8	.5	.1	3.0	25.5	7.8	1.4	.9	.0	1.1
60/64	1.7	.5	.1	2.4	32.3	7.1	.4	1.0	.0	2.3
55/59	.0	.1	.0	.0	2.0	.4	.0	.0	.0	.3
TOTAL	2.8	1.4	.4	5.6	63.3	17.7	2.5	2.1	.0	4.2

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	80	72	69	64	60	58	57	64.5	344
06009	75	70	68	63	59	58	52	62.4	874
12015	73	72	69	64	59	58	55	63.8	340
18021	82	78	74	67	62	60	57	67.5	894
TOT	82	75	71	64	60	58	52	64.8	2852

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.1	5.9	29.3	42.0	21.8	82	188
06009	.0	1.2	8.6	23.8	40.5	23.9	83	163
12015	.0	.0	5.9	29.6	37.6	26.9	83	186
18021	.0	4.0	15.8	40.7	23.7	15.8	78	177
TOT	0	11	64	224	257	158	81	714

PERIOD: (PRIMARY) 1910-1978
(OVER-ALL) 1670-1978

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	77 80	TOT	W FOG	WD FOG
14/16	.0	.0	.0	.1	.0	.0	.0	1	.0	.1
11/13	.0	.0	.1	.0	.3	.8	.3	11	.1	1.3
9/10	.0	.0	.1	.4	.3	.5	.0	10	.0	1.3
7/8	.0	.0	.9	.5	1.1	.3	.0	22	.0	2.8
6	.0	.1	.3	.6	.6	.0	.1	14	.0	1.8
5	.0	.0	1.4	1.8	1.0	.1	.0	34	.0	4.3
4	.0	.5	1.0	2.0	.3	.4	.0	33	.1	4.1
3	.0	.4	1.7	3.4	1.5	.0	.0	55	.1	6.9
2	.0	.4	3.8	2.9	.9	.3	.0	65	.0	8.3
1	.0	.5	5.3	5.0	.8	.3	.0	93	.1	11.7
0	.0	1.5	7.6	5.7	1.3	.0	.0	127	.3	15.9
-1	.0	.5	5.3	5.0	.9	.0	.0	92	.1	11.6
-2	.0	1.7	5.1	4.7	1.0	.1	.0	99	.1	12.5
-3	.0	.5	3.9	2.4	.1	.0	.0	55	.1	6.9
-4	.0	.5	3.4	.9	.1	.0	.0	39	.0	5.0
-5	.0	.1	1.3	.6	.0	.0	.0	16	.0	2.0
-6	.0	.3	.3	.5	.0	.0	.0	8	.1	.9
-7/-8	.1	.1	.5	.4	.0	.0	.0	9	.0	1.1
-9/-10	.0	.0	.0	.3	.0	.0	.0	2	.0	.3
-11/-13	.0	.0	.1	.0	.0	.0	.0	1	.0	.1
TOTAL	1	56	332	293	80	21	3	786	10	776
PCT	1	7.1	42.2	36.3	10.3	2.7	0.4	100.0	1.3	98.7

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.3	.9	.3	.0	.0	.0	1.5	.0	.6	.0	.0	.0	.0	.6

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
1-2	.0	.0	.0	.0	.0	.0	.0	.0	1.1	.7	.0	.0	.0	1.7
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.3	1.4	.0	.0	.0	1.7
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.2	1.2	.0	.0	.0	1.4
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.5
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.2
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.3	.0	.5
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	2.1	3.8	.2	.3	.0	6.4

PERIOD: (OVER-ALL) 1963-1978

JANUARY

AREA 0029 COQUIMBO
28.5S 71.9W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.8	2.7	.0	.0	.0	.0	3.5	.5	.0	.0	.0	.0	.0	1.1	
1-2	1.7	11.1	2.7	.0	.0	.0	15.5	.5	4.4	1.4	.0	.0	.0	6.2	
3-4	.9	5.5	12.9	.6	.0	.0	19.9	.0	1.4	2.0	.0	.0	.0	3.4	
5-6	.0	1.4	14.4	1.4	.0	.0	17.3	.0	1.1	1.5	.1	.0	.0	2.7	
7	.3	.0	4.8	1.1	.2	.0	6.5	.0	.3	.5	.1	.1	.0	.9	
8-9	.0	.3	.8	1.7	.0	.0	2.8	.0	.0	.1	.0	.0	.0	.1	
10-11	.0	.0	1.1	1.9	.0	.0	2.9	.0	.0	.1	.2	.0	.0	.2	
12	.0	.0	.0	.5	.0	.0	.5	.0	.0	.0	.1	.0	.0	.1	
13-16	.0	.0	.0	.6	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	3.7	21.0	36.7	8.0	.2	.0	69.7	.9	7.8	5.5	.5	.1	.0	14.7	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.5	.0	.0	.0	.0	.0	.5	.3	.0	.0	.0	.0	.0	.3	
1-2	.0	.9	.0	.0	.0	.0	.9	.3	.3	.0	.0	.0	.0	.6	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.5	.9	.0	.0	.0	.0	1.4	.6	.6	.0	.0	.0	.0	1.2	95.5

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT DBS
<1	6.9	3.9	.0	.0	.0	.0	10.8	
1-2	2.7	18.6	5.1	.0	.0	.0	26.3	
3-4	.9	7.5	10.2	.6	.0	.0	25.1	
5-6	.0	3.2	17.1	1.5	.0	.0	21.9	
7	.3	.3	5.7	1.2	.3	.0	7.8	
8-9	.0	.2	.9	1.8	.0	.0	3.0	
10-11	.0	.0	1.2	2.1	.3	.0	3.6	
12	.0	.0	.0	.6	.0	.0	.6	
13-16	.0	.0	.0	.6	.0	.0	.6	
17-19	.0	.0	.0	.3	.0	.0	.3	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	10.8	33.8	46.1	8.7	.6	.0	100.0	334

PERIOD: (OVER-ALL) 1949-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.3	9.6	10.0	5.9	3.4	1.3	1.1	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	185	4
6-7	.0	2.1	5.0	11.3	7.9	2.3	1.8	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	173	6
8-9	.0	.9	2.3	2.3	3.4	3.8	1.1	1.4	1.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	93	7
10-11	.0	1.1	.4	2.0	1.8	1.4	.4	.5	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	46	7
12-13	.0	.0	.2	.2	.9	.2	.0	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	12	8
>13	.0	.0	.0	.4	.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	7
INDET	2.5	1.4	1.8	.9	1.1	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	45	3
TOTAL	21	85	110	128	106	53	24	17	15	1	0	0	0	0	0	0	0	0	0	560	5
PCT	3.8	15.2	19.6	22.9	18.9	9.5	4.3	3.0	2.7	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1909-1978
(OVER-ALL) 1870-1978

FEBRUARY

AREA 0029 COQUIMBO
28.75 71.9W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	.0	16.0	.0	76.0
NE	.0	.0	17.4	.0	.0	.0	.0	17.4	.0	.0	.0	.0	.0	.0	82.6
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.0	.0	.0	.0	.0	.0	.0	2.7	.0	.0	.0	.0	.0	97.3
S	.0	.0	.8	.0	.0	.0	.0	.8	1.0	.0	1.2	.0	2.0	.0	95.0
SW	.0	.0	1.7	.0	.0	.0	.0	1.7	.9	.0	.9	.0	3.2	.0	93.3
W	.0	.0	6.6	.0	.0	.0	.0	6.6	3.3	.0	.0	.0	3.3	.0	86.8
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	3.2	.0	3.2	.0	.0	.0	.0	3.2	3.2	.0	.0	.0	.0	.0	93.5
TOT PCT	.1	.0	1.3	.0	.0	.0	.0	1.3	1.2	.0	1.1	.0	2.3	.0	94.1
TOT OBS:	741														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00003	1.0	.0	1.5	.0	.0	.0	.0	1.5	1.0	.0	.5	.0	1.5	.0	95.5
06009	.6	.0	2.2	.0	.0	.0	.0	2.2	.0	.0	1.7	.0	1.1	.0	94.9
12015	.0	.0	2.1	.0	.0	.0	.0	2.1	3.2	.0	1.1	.0	3.2	.0	90.4
18021	.0	.0	1.0	.0	.0	.0	.0	1.0	.5	.0	1.6	.0	3.1	.0	93.7
TOT PCT	.4	.0	1.7	.0	.0	.0	.0	1.7	1.2	.0	1.2	.0	2.2	.0	93.7
TOT OBS:	758														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	1.5	1.8	.1	.0	.0	.0		3.4	4.7	2.0	.0	1.4	5.5	5.8	.0	4.1	2.0	
NE	.5	.7	.0	.0	.0	.0		1.2	5.4	.4	.0	.7	2.1	2.0	.0	1.3	.4	
E	.7	.9	.1	.0	.0	.0		1.7	5.4	.8	.0	1.4	2.9	2.3	.0	2.2	.0	
SE	.9	4.7	2.9	.6	.0	.0		9.1	10.1	6.2	2.0	8.9	9.8	12.5	3.1	10.1	5.9	
S	5.1	27.5	20.3	3.6	.0	.0		56.6	10.6	62.4	70.0	60.3	57.3	52.1	82.8	49.9	59.9	
SW	2.3	10.3	4.0	.4	.0	.0		17.0	8.4	21.5	20.0	17.3	10.5	14.0	1.6	18.5	18.1	
W	.9	1.9	.1	.0	.0	.0		2.9	5.4	2.0	4.0	2.8	1.6	2.2	12.5	4.4	3.4	
NW	.8	1.0	.1	.0	.0	.0		2.0	5.3	.8	.0	1.2	2.3	1.3	.0	3.4	3.2	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	6.2							6.2	.0	3.9	4.0	6.0	7.8	7.6	.0	6.1	7.1	
TOT OBS	491	1972	720	119	1	0	2603		8.9	459	25	452	307	445	16	644	259	
TOT PCT	18.9	48.9	27.7	4.6	.0	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
		7-16	17-27	28-40	00 03					06 09	12 15	18 21		
N	2.6	.8	.0	.0	.0	3.4	4.7	1.9	3.1	5.6	3.5			
NE	.7	.4	.0	.0	.0	1.2	5.4	.4	1.3	2.0	1.1			
E	1.2	.4	.0	.0	.0	1.7	5.4	.7	2.0	2.2	1.6			
SE	3.5	3.8	1.7	.0	.0	9.1	10.1	6.0	9.3	12.2	8.9			
S	18.1	28.3	9.3	.9	.0	56.6	10.6	62.8	59.2	53.2	52.7			
SW	7.8	7.8	1.4	.1	.0	17.0	8.4	21.4	14.6	13.6	18.4			
W	2.1	.9	.0	.0	.0	2.9	5.4	2.1	2.3	2.5	4.1			
NW	1.4	.5	.0	.0	.0	2.0	5.3	.7	1.6	1.3	3.4			
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0			
CALM	6.2					6.2	.0	3.9	6.7	7.4	6.3			
TOT OBS	1134	1117	326	26	0	2603	8.9	484	759	461	899			
TOT PCT	43.6	42.9	12.5	1.0	0		100.0	100.0	100.0	100.0	100.0			

PERIOD: (PRIMARY) 1909-1978
(OVER-ALL) 1870-1978

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	3.9	6.4	46.5	36.0	7.0	.2	.0	10.5	100.0	484
0600Z	6.7	11.2	47.6	28.6	5.9	.0	.0	9.3	100.0	759
1200Z	7.4	15.0	51.2	23.6	2.8	.0	.0	8.0	100.0	461
1800Z	6.3	16.1	50.1	24.5	3.0	.0	.0	8.2	100.0	899
TOT	161	330	1272	720	119	1	0	8.9		2603
PCT	6.2	12.7	48.9	27.7	4.6	*	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & DBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.2	.4	.5	.9		3.7
NE	.4	.1	.0	.3		4.1
E	.2	.2	.0	.2		4.0
SE	.6	.5	.6	3.5		6.5
S	15.2	4.4	14.7	27.7		5.4
SW	4.9	1.9	5.2	8.9		5.4
W	.9	.2	.5	1.2		4.8
NW	.5	.0	*	.2		3.5
VAR	.0	.0	.0	.0		.0
CALM	2.0	.0	.5	2.6		5.0
TOT OBS	152	46	133	276	607	5.4
TOT PCT	25.0	7.6	21.9	45.5	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.0	.0	.5	.1	.3	.2	.0	.0	.0	1.0	
NE	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.5	
E	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.3	
SE	.0	.0	.2	.9	1.7	.6	*	.1	.0	.4	1.2	
S	.3	.0	.3	5.6	14.4	13.3	2.8	.9	.0	.2	24.2	
SW	*	.3	.2	2.2	6.1	2.7	.5	.2	.0	*	8.6	
W	.0	.0	.3	.1	.3	.6	.0	.0	.0	.0	1.4	
NW	.0	.0	.0	.0	*	.2	.0	.0	.0	.0	.5	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.3	1.2	.7	.2	.0	.0	.0	2.8	
TOT OBS	3	2	7	39	145	111	23	7	0	4	246	607
TOT PCT	.5	.3	1.2	9.7	23.9	18.3	3.8	1.2	.0	.7	40.5	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >4500	.5	.6	.6	.6	.6	.6	.6	.6
= OR >3000	1.6	1.9	1.9	1.9	1.9	1.9	1.9	1.9
= OR >2500	5.1	5.5	5.6	5.6	5.6	5.6	5.6	5.6
= OR >2000	20.6	23.5	23.8	23.8	23.8	23.8	23.8	23.8
= OR >1000	40.8	46.8	47.7	47.7	47.7	47.7	47.7	47.7
= OR >600	48.4	55.9	57.6	57.6	57.6	57.6	57.6	57.6
= OR >300	48.9	57.1	58.7	58.7	58.7	58.7	58.7	58.7
= OR >150	49.0	57.2	59.2	59.2	59.2	59.2	59.2	59.2
= OR >0	49.0	57.4	59.3	59.3	59.3	59.3	59.3	59.3
TOTAL	305	357	369	370	370	370	371	371

TOTAL NUMBER OF OBS 622

PCT FREQ NH <5/8 40.4

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8 DBSCD	TOTAL OBS
	15.0	7.3	6.2	6.4	4.8	4.0	6.2	10.2	39.7	645

PERIOD: (PRIMARY) 1909-1978
(OVER-ALL) 1870-1978

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.1	.1
	TOT %	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.1	.1
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1<2	PCP	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
2<5	PCP	.0	.0	.0	.0	.0	.3	.0	.0	.0	.1	.4	.4
	NO PCP	.1	.0	.0	*	.6	.7	.0	.0	.0	.0	1.5	1.5
	TOT %	.1	.0	.0	*	.6	.9	.0	.0	.0	.1	1.9	1.9
5<10	PCP	.0	.1	.0	.0	.4	.1	.1	.0	.0	.0	.7	.7
	NO PCP	.3	.1	.1	.5	8.2	2.6	.7	.0	.0	.3	12.8	12.8
	TOT %	.3	.3	.1	.5	8.5	2.7	.8	.0	.0	.3	13.5	13.5
10+	PCP	.0	.0	.0	.0	.0	*	.1	.0	.0	.0	.1	.1
	NO PCP	1.2	.5	.3	4.5	52.7	18.4	2.1	.7	.0	3.8	84.2	84.2
	TOT %	1.2	.5	.3	4.5	52.7	18.4	2.2	.7	.0	3.8	84.3	84.3
TOT OBS													740
TOT PCT													
1.6 .8 .4 5.0 62.1 22.1 3.1 .7 .0 4.2 100.0													

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.1	.1
	22+	.0	.0	.0	.0	.0	*	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.1	.1
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	11-21	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.1	.1
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0	.2	.2
2<5	0-3	.0	.0	.0	.0	.1	.1	.1	.0	.0	.4	.6	.6
	4-10	.1	.0	.0	*	.4	.8	.1	.0	.0	.0	1.3	1.3
	11-21	.0	.0	.0	.0	.4	.1	.0	.0	.0	.0	.5	.5
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.1	.0	.0	*	.9	.9	.1	.0	.0	.4	2.3	2.3
5<10	0-3	.3	.1	.3	.1	1.0	.3	.1	.2	.0	.4	2.9	2.9
	4-10	.2	.1	.0	.3	3.6	2.7	.6	.0	.0	.0	7.5	7.5
	11-21	.0	.0	.0	.1	4.6	1.0	.0	.0	.0	.0	5.7	5.7
	22+	.0	.0	.0	.0	.5	.1	.0	.0	.0	.0	.5	.5
	TOT %	.5	.2	.3	.5	9.6	4.1	.7	.2	.0	.4	16.6	16.6
10+	0-3	.7	.1	.1	.1	2.8	1.8	.5	.3	.0	4.9	11.3	11.3
	4-10	.8	.2	.5	2.0	22.9	10.5	1.5	.5	.0	.0	38.9	38.9
	11-21	.1	.1	.0	1.5	20.1	5.0	.1	*	.0	.0	26.9	26.9
	22+	.0	.0	.0	.1	3.1	.4	.0	.0	.0	.0	3.6	3.6
	TOT %	1.6	.4	.6	3.7	48.8	17.8	2.1	.8	.0	4.9	80.7	80.7
TOT OBS													977
TOT PCT													
2.2 .6 .9 4.2 59.6 22.8 2.9 1.0 .0 5.7 100.0													

PERIOD: (PRIMARY) 1909-1978
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET) NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00603	.0	.0	.0	8.5	25.5	13.9	1.8	1.8	.0	.0	52.1	47.9	165
06609	.8	.8	.0	10.6	18.2	17.4	4.5	1.5	.0	1.5	55.3	44.7	132
12615	.6	.6	2.4	12.7	30.3	20.6	5.5	.0	.0	.6	73.3	26.7	165
18621	.6	.0	1.8	7.2	20.5	19.9	3.0	1.8	.0	.6	55.4	44.6	166
TOT	3	3	7	61	150	113	23	8	0	4	372	256	628
PCT	.5	.5	1.1	9.7	23.9	18.0	3.7	1.3	.0	.6	59.2	40.8	100.0

TABLE 11

PERCENT FREQUENCY VS BY (NH) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00603	.0	.0	.0	2.9	17.1	80.0	240
06609	.0	.0	.8	2.6	16.5	80.1	266
12615	.0	.0	.0	3.9	17.2	79.0	233
18621	.4	.0	.0	2.0	14.8	82.8	236
TOT	1	0	2	28	163	801	995
PCT	.1	.0	.2	2.8	16.4	80.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VS BY (NH) AND/OR
CEILING HGT (FEET) NH >4/8) BY HOUR

HOUR (GMT)	<150 <5000	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00603	.0	.6	9.8	42.9	47.2	163
06609	.8	1.5	14.4	41.7	43.9	132
12615	.6	3.7	18.4	55.8	25.8	163
18621	.6	2.4	11.0	45.7	43.3	164
TOT	3	13	83	291	248	622
PCT	.5	2.1	13.3	46.8	39.9	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
75/79	.0	.0	.0	.5	.0	.6	.0	.0	7	1.1
70/74	.0	.0	.0	.6	2.6	3.8	1.5	.2	57	8.6
65/69	.0	.0	.0	.2	7.4	15.0	18.7	6.5	315	47.8
60/64	.0	.0	.0	.0	2.1	9.3	20.0	6.3	262	39.8
55/59	.0	.0	.0	.0	.0	.5	1.2	1.1	18	2.7
TOTAL	0	0	0	8	80	192	273	106	659	100.0
PCT	.0	.0	.0	1.2	12.1	29.1	41.4	16.1		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.6	.3	.0	.2	.0	.0
.0	.2	.0	.5	4.4	1.9	1.1	.3	.0	.3
.7	.2	.3	4.0	28.7	9.9	1.3	.2	.0	2.6
.9	.5	.0	.9	25.2	9.3	1.3	.2	.0	1.5
.2	.0	.2	.6	1.6	.6	.0	.0	.0	.2
1.8	.9	.5	5.5	60.5	22.0	3.6	.8	.0	4.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00603	80	72	70	65	60	58	56	65.0	490
06609	80	70	68	64	59	56	52	63.8	767
12615	75	71	69	65	60	57	55	64.8	480
18621	82	78	75	68	63	60	58	68.4	785
TOT	82	76	72	65	60	57	52	65.7	2502

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00603	.0	.0	7.0	29.6	46.8	16.7	82	186
06609	.0	.0	7.5	23.9	47.2	21.4	83	159
12615	.0	.6	13.6	23.2	40.7	22.0	82	177
18621	.0	4.5	18.4	41.9	27.9	7.3	76	179
TOT	0	9	82	209	284	117	80	701

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	77 80	TOT	N FOG	NO FOG
14/16	.0	.0	.0	.0	.0	.1	.0	1	.0	.1
11/13	.0	.0	.0	.0	.1	.0	.1	2	.0	.2
9/10	.0	.0	.0	.6	.1	.1	.0	6	.0	.9
7/8	.0	.0	.4	.6	.1	.3	.1	11	.0	1.6
6	.0	.0	.4	.1	1.2	.3	.0	14	.0	2.1
5	.0	.0	1.0	.6	.6	.3	.0	17	.0	2.5
4	.0	.0	1.2	1.0	.9	.0	.0	21	.0	3.1
3	.0	.4	1.6	2.2	1.0	.3	.0	38	.1	5.5
2	.0	1.0	3.0	3.7	1.9	.3	.0	67	.0	10.0
1	.0	.4	3.6	4.3	1.0	.1	.1	65	.1	9.6
0	.0	.3	6.4	6.4	.4	.0	.0	91	.1	13.5
-1	.0	1.0	5.5	7.0	1.3	.0	.0	101	.0	15.1
-2	.1	.9	7.2	6.1	.7	.1	.0	102	.3	15.0
-3	.0	.7	3.6	3.9	.1	.0	.0	56	.1	8.2
-4	.0	.1	3.3	1.3	.3	.0	.0	34	.0	5.1
-5	.1	.0	1.9	1.2	.0	.0	.0	22	.0	3.3
-6	.0	.1	.6	.4	.1	.0	.0	9	.0	1.3
-7/-8	.1	.0	.4	1.0	.0	.0	.0	11	.0	1.6
TOTAL	3	35	270	273	70	14	3	668	6	662
PCT	.4	5.2	40.4	40.9	10.5	2.1	.4	100.0	.9	99.1

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.3	.3	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
1-2	.9	.6	.0	.0	.0	.0	1.5	.0	.3	.0	.0	.0	.0	.3
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.2	.9	.0	.0	.0	.0	2.2	.0	.3	.3	.0	.0	.0	.6

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.3	.3	.0	.0	.0	.0	.6	.0	1.6	.2	.0	.0	.0	1.8
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.3	.6	.1	.0	.0	1.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.1	1.2	.0	.0	.0	1.3
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.0	.0	.5
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.3	.3	.0	.0	.0	.0	.6	.0	2.0	2.3	.4	.0	.0	4.7

PERIOD: (OVER-ALL) 1963-1978

FEBRUARY

AREA 0029 COQUIMBO
28.75 71.9W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.5	1.2	.0	.0	.0	.0	1.8	.4	.3	.0	.0	.0	.0	.7
1-2	.9	13.7	5.3	.0	.0	.0	19.8	.7	8.0	1.1	.0	.0	.0	9.8
3-4	.2	5.1	13.1	.5	.0	.0	19.0	.1	2.1	2.1	.3	.0	.0	4.6
5-6	.0	2.3	7.4	1.5	.0	.0	11.3	.0	.4	2.5	.0	.0	.0	2.9
7	.0	.0	3.4	1.7	.0	.0	5.1	.3	.0	1.4	.2	.0	.0	1.9
8-9	.0	.0	1.6	2.4	.0	.0	4.0	.0	.0	.1	.1	.0	.0	.2
10-11	.0	.2	.0	.3	.0	.0	.5	.0	.1	.0	.0	.0	.0	.1
12	.0	.2	.5	.2	.0	.0	.9	.0	.1	.2	.1	.0	.0	.3
13-16	.0	.0	.0	.3	.2	.0	.5	.0	.0	.0	.0	.1	.0	.1
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.6	22.8	31.3	7.0	.2	.0	63.0	1.5	10.9	7.3	.6	.1	.0	20.4

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	2.7	.0	.0	.0	.0	2.7	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	2.9	.0	.0	.0	.0	2.9	.0	.3	.0	.0	.0	.0	.3	94.7

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	8.7	2.1	.0	.0	.0	.0	10.8	
1-2	3.0	26.3	6.3	.0	.0	.0	35.6	
3-4	.3	8.1	15.9	.9	.0	.0	24.6	
5-6	.0	2.7	11.1	1.5	.0	.0	15.3	
7	.3	.0	4.8	2.1	.0	.0	7.2	
8-9	.0	.0	1.8	2.4	.0	.0	4.2	
10-11	.0	.3	.0	.3	.0	.0	.6	
12	.0	.3	.6	.3	.0	.0	1.2	
13-16	.0	.0	.0	.3	.3	.0	.6	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	12.3	39.8	39.8	7.8	.3	.0	100.0	334

PERIOD: (OVER-ALL) 1949-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.7	5.4	7.2	6.8	1.5	1.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	125	4
6-7	.0	1.4	3.5	10.4	5.4	1.5	2.1	.6	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	130	6
8-9	.0	1.2	1.4	6.2	6.8	3.5	4.3	1.7	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	124	7
10-11	.0	1.0	.4	1.5	1.9	2.5	1.0	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	47	7
12-13	.0	.0	.6	.8	.2	.4	.8	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	16	7
>13	.0	.0	.0	.4	.4	.4	.4	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	9
INDET	2.3	.6	1.4	1.7	1.0	.8	2.1	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	54	5
TOTAL	21	49	74	144	89	52	58	19	11	0	0	0	0	0	0	0	0	0	0	517	6
PCT	4.1	9.5	14.3	27.9	17.2	10.1	11.2	3.7	2.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1909-1978
(OVER-ALL) 1874-1978

MARCH

TABLE 1

AREA 0029 COQUIMBO
28.55 72.1W

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THDR LTNG	FGG W0 PCPN	FGG W0 PCPN PAST HR	SMOKE HAZE	SPRAY BLWG SNOW	NO SIG WEA
N	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NE	.0	.0	6.1	.0	.0	.0	.0	6.1	.0	.0	.0	.0	6.1	.0	87.9
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	22.2	.0	.0	.0	77.8
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.8	.0	.0	.0	98.2
S	.1	.0	1.1	.0	.0	.0	.0	1.2	.2	.3	1.4	.0	1.7	.0	95.2
SW	.3	.0	.8	.0	.0	.0	.0	1.1	.6	.0	3.7	.0	3.4	.6	90.4
W	.0	.0	.0	.0	.0	.0	.0	.0	5.5	.0	11.0	.0	.0	.0	83.6
NW	.0	.0	.0	.0	.0	.0	.0	.0	7.3	.0	.0	.0	.0	.0	92.7
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	.1	.0	1.0	.0	.0	.0	.0	1.1	.4	.2	2.0	.0	1.8	.1	94.3
TOT OBS:	895														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA								
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THOR LTNG	FGG W0 PCPN	FGG W0 PCPN PAST HR	SMOKE HAZE	SPRAY BLWG BLWG	DUST SNOW	NO SIG WEA
00003	.0	.0	.4	.0	.0	.0	.0	.4	.4	.0	2.2	.0	.9	.0		96.1
06009	.5	.0	1.0	.0	.0	.0	.0	1.6	.0	.5	2.6	.0	.0	.0		95.3
12015	.0	.0	1.6	.0	.0	.0	.0	1.6	.8	.4	2.0	.0	2.0	.0		93.3
18021	.0	.0	1.3	.0	.0	.0	.0	1.3	.4	.0	1.7	.0	3.9	.4		92.2
TOT PCT	.1	.0	1.1	.0	.0	.0	.0	1.2	.4	.2	2.1	.0	1.8	.1		94.2
TOT OBS:	907															

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	1.3	1.7	.1	.0	*	.0		3.1	4.8	1.1	4.0	2.7	4.1	3.2	8.6	4.2	2.5	
NE	.8	1.3	*	.0	*	.0		2.1	4.6	1.0	.0	1.0	2.2	4.1	.0	2.8	1.2	
E	.5	1.0	.1	.0	.0	.0		1.6	5.2	.5	.0	1.0	2.7	2.5	2.6	1.7	1.0	
SE	1.2	5.1	3.1	.5	.0	.0		10.0	9.8	7.1	6.0	10.5	11.7	10.7	16.4	10.1	9.8	
S	6.1	27.5	21.2	4.3	.1	.0		59.2	10.9	65.4	67.0	63.1	57.9	57.8	52.0	54.7	57.3	
SW	2.0	9.2	3.5	.5	.0	.0		14.1	8.8	15.6	23.0	12.8	11.4	11.0	13.8	15.4	18.9	
W	.7	1.2	*	.0	.0	.0		2.0	5.0	2.3	.0	1.0	1.9	2.0	4.6	2.7	1.3	
NW	.9	1.3	.1	.0	.0	.0		2.3	4.9	1.8	.0	1.9	2.2	2.4	2.0	2.8	2.8	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	5.6							5.6	.0	.0	.0	5.9	6.0	6.2	.0	5.7	5.6	
TOT OBS	615	1511	901	169	4	0	3200		9.2	558	25	539	403	562	38	735	340	
TOT PCT	19.2	47.2	28.2	5.3	.1	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	06	12	18
N	2.6	.5	.0	.0	*		3.1	4.8	1.2	3.3	3.6	3.7
NE	1.8	.3	.0	.0	*		2.1	4.6	1.0	1.5	3.8	2.3
E	1.1	.5	.0	.0	.0		1.6	5.2	.5	1.7	2.5	1.5
SE	5.4	5.1	1.3	.1	.0		10.0	9.8	7.0	11.0	11.1	10.0
S	17.4	29.6	11.5	.7	.1		59.2	10.9	65.5	60.9	57.5	55.4
SW	6.0	6.6	1.5	.1	.0		14.1	8.8	16.0	12.2	11.2	16.5
W	1.4	.5	.0	.0	.0		2.0	5.0	2.2	1.4	2.1	2.2
NW	1.8	.5	.0	.0	.0		2.3	4.9	1.8	2.0	2.4	2.8
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	5.6						5.6	.0	4.8	5.9	5.8	5.7
TOT OBS	1317	1394	456	30	3	3200		9.2	583	942	600	1075
TOT PCT	41.2	43.6	14.3	.9	.1		100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1909-1978
(OVER-ALL) 1874-1978

MARCH

AREA 0029 COQUIMBO
28.55 72.1W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	11-21	22-33	34-47	48+	MEAN	PCT FREQ	TOTAL OBS
0000Z	4.8	9.9	46.3	32.1	6.7	.2	.0	10.3	100.0	583
0600Z	5.9	10.5	48.6	29.2	5.4	.3	.0	9.5	100.0	942
1201Z	5.8	16.8	47.0	26.0	4.3	.0	.0	8.6	100.0	600
1807Z	5.7	16.5	46.6	26.3	4.9	.0	.0	8.7	100.0	1075
TOT	180	435	1311	901	169	4	0	9.2		3200
PCT	5.6	13.6	47.2	28.2	5.3	.1	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 9 OBS	TOTAL OBS	MEAN CLOUD COVER
N	.9	.1	.2	.5		4.1
NE	.3	.3	.5	.8		5.7
E	.0	.0	.1	.2		7.7
SE	.3	.8	1.8	3.4		6.6
S	16.6	6.6	14.9	26.6		5.3
SW	4.2	1.8	3.6	7.9		5.5
W	.3	.0	.4	1.3		6.5
NW	.2	.1	.2	1.2		6.6
VAR	.0	.0	.0	.0		.0
CALM	.3	.6	.8	1.5		6.0
TOT OBS	167	74	161	315	717	5.5
TOT PCT	23.3	10.3	22.5	43.9	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH ANY HGT	<5/8	TOTAL OBS
N	.0	.0	.0	.0	.5	.1	.0	.0	.0	.0	.0	1.2	
NE	.0	.1	.0	.3	.5	.1	.0	.0	.0	.0	.0	1.0	
E	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.1	
SE	.0	.0	.5	.8	2.1	1.4	.5	.0	.0	.0	.0	1.5	
S	.4	.0	1.9	8.3	13.8	9.8	3.1	.7	.3	.0	.0	26.5	
SW	.2	.0	.7	1.4	4.5	3.0	1.0	.0	.0	.0	.0	6.8	
W	.0	.0	.3	.2	.7	.4	.0	.0	.0	.0	.0	.3	
NW	.0	.0	.1	.1	.5	.4	.0	.1	.0	.0	.0	.5	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.3	.1	1.0	.3	.0	.0	.0	.1	.1	1.4	
TOT OBS	4	1	27	82	169	111	33	6	2	1	281	717	
TOT PCT	.6	.1	3.8	11.4	23.6	15.5	4.6	.8	.3	.1	39.2	100.0	

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	= OR >10	= OR >5	= OR >2	VSBY (NM) = OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.3	.4	.4	.4	.4	.4	.4	.4
= OR >5000	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2
= OR >3500	4.1	5.8	5.8	5.8	5.8	5.8	5.8	5.8
= OR >2000	16.2	21.3	21.3	21.3	21.3	21.3	21.3	21.3
= OR >1000	33.8	44.2	44.8	44.8	44.8	44.8	44.8	44.8
= OR >600	43.1	55.5	56.2	56.2	56.2	56.2	56.2	56.2
= OR >300	45.6	59.3	60.0	60.0	60.0	60.0	60.0	60.0
= OR >150	45.6	59.3	60.2	60.2	60.2	60.2	60.2	60.2
= OR >0	45.9	59.8	60.9	60.9	60.9	60.9	60.9	60.9
TOTAL	334	435	443	443	443	443	443	443

TOTAL NUMBER OF OBS: 728

PCT FREQ NH <5/8: 39.1

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
10.2	9.3	8.0	6.1	4.8	3.5	7.9	9.9	39.8	.5	774

PERIOD: (PRIMARY) 1909-1978
(OVER-ALL) 1874-1978

MARCH

AREA 0029 COQUIMBO
28.55 72.1W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VISBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1
	TOT %	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2<5	PCP	.0	.1	.0	.0	.1	.1	.0	.0	.0	.0	.0	.3
	NO PCP	.1	.1	.1	.0	.2	.0	.1	.0	.0	.0	.0	.6
	TOT %	.1	.1	.1	.0	.3	.1	.1	.0	.0	.0	.0	.9
5<10	PCP	.0	.0	.0	.0	.5	.1	.0	.0	.0	.0	.0	.6
	NO PCP	.3	.2	.2	1.9	12.8	4.1	.6	.5	.0	.4	21.1	21.7
	TOT %	.3	.2	.2	1.9	13.3	4.1	.6	.5	.0	.4	21.7	21.7
10+	PCP	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.2
	NO PCP	1.4	1.5	.2	4.4	51.8	13.0	1.3	1.0	.0	2.6	77.1	77.3
	TOT %	1.4	1.5	.2	4.4	52.0	13.0	1.3	1.0	.0	2.6	77.3	77.3
TOT OBS		1.8	1.8	.5	6.3	65.7	17.2	2.0	1.5	.0	3.0	100.0	895
TOT PCT		1.8	1.8	.5	6.3	65.7	17.2	2.0	1.5	.0	3.0	100.0	895

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VISBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0	.3
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0	.3
2<5	0-3	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.2
	4-10	.1	.1	.0	.1	.3	.3	.1	.0	.0	.0	.0	.9
	11-21	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.2
	22+	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1
	TOT %	.2	.1	.1	.1	.5	.3	.1	.0	.0	.0	.0	1.3
5<10	0-3	.1	.0	.0	.1	.7	.5	.1	.1	.0	1.2	2.7	2.7
	4-10	.2	.2	.2	1.1	6.0	2.1	.4	.3	.0	.0	10.4	10.4
	11-21	.0	.0	.0	.7	6.1	1.8	.0	.0	.0	.0	8.6	8.6
	22+	.0	.0	.0	.0	1.0	.2	.0	.0	.0	.0	1.1	1.1
	TOT %	.3	.2	.2	1.8	13.7	4.5	.5	.4	.0	1.2	22.8	22.8
10+	0-3	.5	.5	.1	.1	4.0	.7	.2	.3	.0	3.1	9.5	9.5
	4-10	1.0	1.2	.1	2.5	19.5	7.6	.9	.6	.0	.0	33.3	33.3
	11-21	.1	.1	.0	1.5	21.3	4.2	.1	.1	.0	.0	27.3	27.3
	22+	.0	.0	.0	.2	4.9	.3	.0	.0	.0	.0	5.4	5.4
	TOT %	1.6	1.8	.2	4.2	49.7	12.8	1.1	1.0	.0	3.1	75.5	75.5
TOT OBS		2.1	2.0	.4	6.1	64.1	17.6	1.7	1.5	.0	4.3	100.0	1152
TOT PCT		2.1	2.0	.4	6.1	64.1	17.6	1.7	1.5	.0	4.3	100.0	1152

MARCH

PERIOD: (PRIMARY) 1909-1974
(OVER-ALL) 1874-1974

TABLE 10

AREA 0029 COQUIMBO
28.55 72.1WPERCENT FREQUENCY OF CEILING HEIGHTS (FEET) NH $\geq 4/8$ AND
OCCURRENCE OF NH $\leq 3/8$ BY HOUR

HR	000	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NH $\leq 3/8$ ANY MGT	TOTAL OBS
(GMT)	149	299	599	999	1999	3499	4999	6499	7999				
00003	.5	.5	3.7	12.0	20.9	8.9	4.2	1.0	.5	.0	52.4	47.6	191
06009	1.3	.0	2.6	9.9	16.4	15.1	6.6	.7	.0	.0	52.6	47.4	152
12015	.5	.0	4.3	13.5	28.4	20.2	4.8	1.0	.5	.5	73.6	26.4	208
18021	.5	.0	4.2	9.0	24.9	16.4	2.6	.5	.0	.0	58.2	41.8	189
TOT	5	1	28	83	171	113	33	6	2	1	443	297	740
PCT	.7	.1	3.8	11.2	23.1	15.3	4.5	.8	.3	.1	59.9	40.1	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL
(GMT)							OBS
00003	.4	.0	.0	.4	19.0	80.3	274
06009	.0	.0	.0	1.0	24.3	74.7	288
12015	.0	.0	.3	2.4	22.6	74.7	292
18021	.0	.0	.6	1.3	25.2	72.9	310
TOT	1	0	3	15	266	879	1164
PCT	.1	.0	.3	1.3	22.9	75.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING MGT (FEET) NH $\geq 4/8$ BY HOUR

HR	<150 <50VD	<600 <1	<1000 <5	1000+ AND 5+	NH $\leq 3/8$ AND 5+	TOTAL
(GMT)						OBS
00003	.5	4.8	16.9	36.0	47.1	189
06009	1.4	4.1	14.3	40.1	45.6	147
12015	.5	4.9	19.9	54.4	25.7	206
18021	.5	4.8	14.5	44.6	40.9	186
TOT	5	34	121	322	285	728
PCT	.7	4.7	16.6	44.2	39.1	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL	PCT
									OBS	FREQ
75/79	.0	.0	.0	.0	.1	.0	.0	.0	1	.1
70/74	.0	.0	.0	.4	2.4	2.8	.5	.1	49	6.2
65/69	.0	.0	.0	.5	4.0	13.4	15.0	3.5	287	36.2
60/64	.0	.0	.0	.5	1.9	11.7	26.6	9.0	394	49.7
55/59	.0	.0	.0	.0	.1	.5	3.3	3.9	62	7.8
TOTAL	0	0	0	9	68	225	360	131	793	100.0
PCT	.0	.0	.0	1.1	8.6	28.4	45.4	16.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
75/79	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
70/74	.0	.1	.1	.8	3.9	.9	.1	.0	.0	.3
65/69	1.0	.4	.3	3.0	22.5	6.2	.8	.8	.0	1.3
60/64	.7	1.1	.6	2.6	33.2	8.3	.8	.6	.0	1.9
55/59	.0	.3	.0	.9	5.1	1.5	.0	.0	.0	.0
TOTAL	1.7	1.9	.9	7.3	64.9	17.0	1.6	1.4	.0	3.4

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL
(GMT)									OBS
00003	77	71	69	64	59	56	55	63.9	583
06009	77	69	67	63	57	55	53	62.5	948
12015	75	72	68	63	58	55	54	63.2	597
18021	84	75	72	66	60	57	54	66.4	967
TOT	84	73	70	64	58	56	53	64.1	3095

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL
(GMT)										OBS
00003	.0	1.5	5.5	28.5	46.0	18.5	82	200		
06009	.0	1.1	2.8	27.1	50.8	18.2	83	181		
12015	.0	.5	8.2	26.9	45.7	18.7	82	219		
18021	.0	1.5	17.1	31.2	40.0	10.2	78	205		
TOT	0	9	69	229	366	132	81	805		

MARCH

PERIOD: (PRIMARY) 1909-1978
(OVER-ALL) 1874-1978

TABLE 17

AREA 0029 COQUIMBO
28.5S 72.1W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	77 80	TOT	W FOG	WD FOG
11/13	.0	.0	.2	.0	.1	.0	.0	3	.0	.4
9/10	.0	.1	.1	.0	.6	.1	.1	9	.0	1.1
7/8	.0	.0	.3	.5	.8	.0	.0	15	.1	1.7
6	.0	.0	.6	.8	.3	.0	.0	16	.0	1.9
5	.0	.1	.7	.6	.4	.2	.0	17	.0	2.0
4	.0	.5	1.3	.8	.3	.0	.0	26	.0	3.1
3	.0	.6	1.3	1.3	.8	.2	.0	36	.1	4.2
2	.4	1.2	3.7	3.7	1.0	.0	.0	83	.6	9.3
1	.1	1.3	3.3	4.2	1.8	.4	.0	93	.0	11.1
0	.2	1.9	6.9	6.5	1.4	.0	.0	142	.4	16.6
-1	.0	2.8	5.9	4.8	.6	.0	.0	117	.4	13.6
-2	.1	1.2	6.5	4.3	.4	.0	.1	105	.1	12.4
-3	.1	1.4	4.4	1.7	.2	.0	.0	66	.2	7.7
-4	.1	1.3	3.8	1.8	.0	.0	.0	59	.1	6.9
-5	.0	.4	1.9	.5	.1	.0	.0	24	.1	2.8
-6	.2	.1	.4	.5	.0	.0	.0	10	.1	1.1
-7/-8	.1	1.0	.2	.0	.0	.0	.0	11	.0	1.3
-9/-10	.0	.0	.1	.0	.0	.0	.0	1	.0	.1
-11/-13	.0	.0	.0	.1	.0	.0	.0	1	.0	.1
-14/-16	.0	.1	.0	.0	.0	.0	.0	1	.0	.1
-17/-19	.0	.1	.0	.0	.0	.0	.0	1	.0	.1
TOTAL	12	118	351	268	77	8	2	836	19	817
PCT	1.4	14.1	42.0	32.1	9.2	1.0	.2	100.0	2.3	97.7

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.2	.3	.0	.0	.0	.0	.5	.3	.0	.0	.0	.0	.0	.3
1-2	.2	.7	.2	.0	.0	.0	1.0	.0	.2	.1	.0	.0	.0	.3
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.4	.9	.2	.0	.0	.0	1.5	.3	.3	.1	.0	.0	.0	.8

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.3	.0	.0	.0	.3	.3	1.2	.0	.0	.0	.0	1.4
1-2	.0	.4	.0	.0	.0	.0	.4	.0	1.6	.9	.0	.0	.0	2.5
3-4	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.9	.1	.0	.0	2.3
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.3	.3	.0	.0	.0	.7
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.4	.3	.0	.0	.0	.7	.3	4.4	2.3	.1	.0	.0	7.0

PERIOD: (OVER-ALL) 1963-1978

MARCH

AREA 0029 COQUIMBO
29.55 72.1W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	1.0	4.0	.0	.0	.0	.0	5.0	.5	1.7	.3	.0	.0	.0	2.5
1-2	1.6	10.7	6.3	.0	.0	.0	18.5	.0	4.3	.9	.0	.0	.0	5.2
3-4	.2	5.7	11.6	1.2	.0	.0	18.7	.1	1.6	1.8	.1	.0	.0	3.5
5-6	.0	1.0	10.4	2.8	.0	.0	14.2	.3	2.0	1.0	.1	.0	.0	3.4
7	.0	.3	3.6	2.0	.0	.0	5.9	.0	.0	.7	.1	.0	.0	.7
8-9	.0	.0	1.0	2.3	.0	.0	3.4	.0	.0	.3	.0	.0	.0	.3
10-11	.0	.0	.0	2.0	.0	.0	2.0	.0	.0	.0	.1	.0	.0	.1
12	.0	.0	.0	.5	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	2.8	21.7	32.8	10.9	.0	.0	68.2	.8	9.6	4.9	.3	.0	.0	15.6

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.7	.0	.0	.0	.0	.7	.3	.3	.0	.0	.0	.0	.5	
1-2	.2	.2	.0	.0	.0	.0	.4	.1	.0	.0	.0	.0	.0	.1	
3-4	.0	.9	.0	.0	.0	.0	.9	.0	.4	.0	.0	.0	.0	.4	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.2	1.8	.0	.0	.0	.0	2.0	.4	.7	.0	.0	.0	.0	1.0	96.9

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	6.2	8.3	.5	.0	.0	.0	15.0	
1-2	2.1	17.8	6.3	.0	.0	.0	28.2	
3-4	.3	10.1	14.2	1.3	.0	.0	25.8	
5-6	.3	3.4	11.6	2.8	.0	.0	18.1	
7	.0	.3	4.4	2.1	.0	.0	6.7	
8-9	.0	.0	1.3	2.3	.0	.0	3.6	
10-11	.0	.0	.0	2.1	.0	.0	2.1	
12	.0	.0	.0	.5	.0	.0	.5	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	8.8	39.8	40.3	11.1	.0	.0	100.0	387

PERIOD: (OVER-ALL) 1949-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.6	7.2	7.9	4.0	2.2	.7	1.2	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	179	4
6-7	.0	1.9	6.3	8.4	6.0	3.8	1.9	.4	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	200	6
8-9	.0	.3	1.6	2.9	4.9	3.8	2.2	1.0	1.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	128	8
10-11	.0	1.9	3.4	1.6	2.2	1.2	.9	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	81	6
12-13	.0	.0	2.1	.6	1.3	.4	.1	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	34	6
>13	.0	.0	.0	.9	.1	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	7
INDET	2.4	.3	1.0	1.5	.9	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	51	4
TOTAL	34	79	152	155	120	74	47	16	18	5	0	0	0	0	0	0	0	0	0	680	5
PCT	5.0	11.6	22.4	19.9	17.6	10.9	6.9	2.4	2.6	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1910-1977
(OVER-ALL) 1872-1977

APRIL

TABLE 1

AREA 0029 COQUIMBO
28.65 72.0W

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG	NO SIG WEA
N	2.6	.0	3.9	.0	.0	.0	.0	6.5	.0	.0	2.6	.0	.0	.0	91.0
NE	.0	.0	2.6	.0	.0	.0	.0	2.6	.0	.0	.0	.0	.0	.0	97.4
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.2	91.8
SE	.0	.0	1.9	.0	.0	.0	.0	1.9	.5	.0	.0	.0	1.9	.0	95.7
S	.0	.0	.7	.0	.0	.0	.0	.7	.7	.2	1.3	.0	1.0	.0	96.1
SW	.8	.0	.6	.0	.0	.0	.0	1.4	.8	.0	1.2	.0	2.3	.0	94.4
W	.0	.0	2.8	.0	.0	.0	.0	2.8	.0	.0	.0	.0	.0	.0	97.2
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.1	.0	.0	.0	94.9
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	.0	.0	98.1
TOT PCT	.2	.0	.9	.0	.0	.0	.0	1.2	.6	.1	1.2	.1	1.1	.1	95.6
TOT OBS:	850														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG	NO SIG WEA
0003	.5	.0	.5	.0	.0	.0	.0	.9	.5	.0	1.4	.5	1.8	.0	95.0
0609	.0	.0	1.4	.0	.0	.0	.0	1.4	.0	.9	.9	.0	.0	.0	96.7
12015	.9	.0	.5	.0	.0	.0	.0	1.4	1.4	.0	.5	.0	1.4	.0	95.5
18021	.0	.0	1.3	.0	.0	.0	.0	1.3	.4	.0	3.1	.0	.9	.4	93.9
TOT PCT	.3	.0	.9	.0	.0	.0	.0	1.3	.6	.2	1.5	.1	1.0	.1	95.2
TOT OBS:	880														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	.7	3.3	1.0	.0	.0	.0		5.0	7.3	4.2	.0	4.8	6.3	4.8	8.3	5.0	5.3	
NE	.8	1.6	.2	.0	.0	.0		2.5	5.9	2.4	.0	1.4	3.3	3.2	5.0	3.0	1.9	
E	.9	1.0	.1	.0	.0	.0		2.0	4.8	1.7	7.1	1.0	2.9	3.2	1.7	1.6	1.3	
SE	1.4	5.5	3.7	.6	.0	.0		11.3	10.3	9.6	23.2	10.6	12.9	11.9	7.5	12.1	9.7	
S	5.2	24.1	19.9	3.9	.2	.0		53.4	10.9	53.7	47.3	57.2	51.2	52.9	38.3	51.9	51.5	
SW	1.9	7.4	3.6	.5	.0	.0		13.4	9.0	14.7	13.2	13.1	11.8	10.8	17.5	14.2	15.7	
W	.6	1.1	.1	.0	.0	.0		1.9	5.6	1.4	.0	1.2	2.3	2.2	.0	2.2	2.5	
NW	.9	2.0	.6	.0	.0	.0		3.5	6.8	3.0	3.6	3.6	3.3	3.0	8.3	4.1	3.4	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	7.1							7.1	.0	7.4	3.6	7.1	5.7	8.0	13.3	5.8	8.8	
TOT OBS	556	1316	834	145	5	0	2856		9.1	498	28	506	334	497	30	668	295	
TOT PCT	19.5	46.1	29.2	5.1	.2	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	06	12	18	21
N	2.6	2.3	.1	.0	.0	.0	5.0	7.3	4.0	5.4	5.0	5.1	
NE	1.7	.8	.0	.0	.0	.0	2.5	5.9	2.3	2.1	3.3	2.6	
E	1.5	.4	.0	.0	.0	.0	2.0	4.8	1.9	1.8	3.1	1.5	
SE	3.8	5.0	2.3	.2	.0	.0	11.3	10.3	10.3	11.5	11.6	11.3	
S	16.0	28.6	10.1	.8	.0	.0	53.4	10.9	53.2	54.8	52.0	51.8	
SW	5.7	6.1	1.6	.0	.0	.0	13.4	9.0	14.7	12.6	11.1	14.6	
W	1.4	.5	.0	.0	.0	.0	1.9	5.6	1.3	1.7	2.1	2.3	
NW	2.1	1.3	.1	.0	.0	.0	3.5	6.8	3.0	3.5	3.3	3.9	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	7.1						7.1	.0	7.2	6.5	8.3	6.7	
TOT OBS	1195	1226	408	27	0	2856		9.1	526	840	527	963	
TOT PCT	41.8	42.9	14.3	.9	.0		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1910-1977
(OVER-ALL) 1872-1977

APRIL

AREA 0029 COQUIMBO
28.65 72.0W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	11-21	22-33	34-47	48+	MEAN	PCT FREQ	TOTAL OBS
0000Z	7.2	11.8	43.7	21.2	6.1	.0	.0	9.6	100.0	526
0600Z	6.5	10.4	46.1	21.8	5.2	.0	.0	9.5	100.0	840
1200Z	8.3	14.4	44.6	28.1	4.2	.4	.0	8.7	100.0	527
1800Z	6.7	13.4	48.2	26.5	4.9	.3	.0	8.8	100.0	963
TOT	202	334	1316	834	145	5	0	9.1		2856
PCT	7.1	12.4	46.1	29.2	5.1	.2	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	.4	.3	.9	2.2		6.6
NE	.2	.4	.7	.4		5.4
E	.3	.1	.3	.4		5.2
SE	.6	.4	1.9	2.5		6.3
S	15.1	5.9	15.4	26.0		5.4
SW	4.1	.9	2.6	7.7		5.4
W	.8	.1	.3	1.2		5.5
NW	.2	.2	.4	.8		6.0
VAR	1.0	.0	.0	.0		.0
CALM	1.8	.6	1.2	3.1		5.3
TOT OBS	197	60	158	294	669	5.5
TOT PCT	23.5	9.0	23.6	43.9	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NM >4/8)
AND OCCURRENCE OF NM <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
	149	299	399	999	1999	3499	4999	6499	7999			
N	.0	.0	.0	.3	1.5	1.0	.3	.0	.0	.0	.9	
NE	.0	.0	.1	.3	.6	.9	.0	.0	.0	.0	.7	
E	.0	.0	.0	.1	.3	.1	.0	.0	.0	.0	.6	
SE	.0	.0	.0	.7	1.9	.9	.4	.0	.0	.1	1.2	
S	.6	.0	.1	7.1	17.8	9.0	2.8	.9	.0	.3	23.8	
SW	.1	.0	.0	.9	4.8	1.9	.7	.5	.0	.2	5.8	
W	.1	.1	.1	.3	.2	.0	.1	.0	.1	.1	1.1	
NW	.2	.0	.0	.1	.6	.2	.1	.0	.0	.0	.4	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.1	.6	1.9	1.3	.1	.0	.0	.0	2.5	
TOT OBS	7	1	4	70	198	97	30	9	1	5	247	669
TOT PCT	1.0	.1	.6	10.5	29.6	14.5	4.5	1.3	.1	.7	36.9	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NM >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>30YD	>0
>6500	.9	.9	.9	.9	.9	.9	.9	.9
>5000	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
>3500	6.1	6.4	6.4	6.4	6.4	6.4	6.4	6.4
>2000	18.3	20.5	20.6	20.6	20.6	20.6	20.6	20.6
>1000	43.8	48.7	49.7	49.7	49.7	49.7	49.7	49.7
>600	51.6	59.2	60.3	60.3	60.3	60.3	60.3	60.3
>300	52.0	59.7	60.9	60.9	60.9	60.9	60.9	60.9
>150	52.2	59.9	61.0	61.0	61.0	61.0	61.0	61.0
>0	52.6	60.6	62.1	62.1	62.1	62.1	62.1	62.1
TOTAL	362	417	427	427	427	427	427	427

TOTAL NUMBER OF OBS: 688

PCT FREQ NH <5/8: 37.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
13.3	7.1	7.7	6.6	2.7	3.7	7.9	10.9	39.2	1.0	732

PERIOD: (PRIMARY) 1910-1977
(OVER-ALL) 1872-1977

APRIL

AREA 0029 COQUIMBO
28.65 72.0W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
	NO PCP	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
	NO PCP	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
	NO PCP	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	
2<5	PCP	.1	.0	.0	.0	.2	*	.0	.0	.0	.0	.4	1.4
	NO PCP	.0	.0	.0	.1	.9	.3	.0	.1	.0	.0	.0	
	TOT %	.1	.0	.0	.1	1.1	.3	.0	.1	.0	.0	.4	
5<10	PCP	.1	.1	.0	.1	.1	.2	.1	.0	.0	.0	.6	16.6
	NO PCP	.9	.3	.4	1.3	8.9	2.2	.3	.4	.0	1.1	16.0	
	TOT %	1.0	.4	.4	1.4	9.0	2.4	.6	.4	.0	1.1	16.6	
10+	PCP	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.2	81.1
	NO PCP	3.2	1.9	1.1	4.6	49.3	12.5	1.5	1.8	.0	5.1	80.9	
	TOT %	3.4	1.9	1.1	4.6	49.4	12.5	1.5	1.8	.0	5.1	81.1	
TOT OBS		848											
TOT PCT		4.6	2.3	1.4	6.2	59.8	15.2	2.1	2.3	.0	6.1	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	.2	.3
	4-10	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.2	.0	.0	.0	.0	.1	.3	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
	4-10	.1	.0	.0	.0	*	*	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.0	.0	.0	*	*	.0	.0	.0	.0	.2	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4
	4-10	.0	.0	.0	.1	.2	*	.0	.0	.0	.0	.4	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.1	.2	*	.0	.0	.0	.0	.4	
2<5	0-3	*	*	.0	.0	.0	.3	.0	.0	.0	.0	.4	2.4
	4-10	.2	.1	.0	*	.6	.3	.0	.1	.0	.0	1.4	
	11-21	.2	.0	.0	*	.3	*	.0	.0	.0	.0	.7	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.5	.2	.0	*	1.1	.6	.0	.1	.0	.0	2.4	
5<10	0-3	.3	.1	.0	*	1.1	.5	*	.2	.0	1.1	3.3	19.1
	4-10	.6	.2	.3	.9	5.0	2.3	.4	*	.0	.0	9.9	
	11-21	*	.0	.0	.2	3.9	.7	.1	*	.0	.0	5.0	
	22+	.0	.0	.0	.1	.7	.2	.0	.0	.0	.0	.9	
	TOT %	1.0	.3	.3	1.3	10.6	3.6	.6	.3	.0	1.1	19.1	
10+	0-3	.2	.2	.3	.4	3.5	1.0	.4	.6	.0	6.4	13.2	77.7
	4-10	2.4	1.1	.4	2.8	20.0	7.2	1.2	1.1	.0	.0	36.3	
	11-21	.3	.3	.1	1.0	19.0	3.8	.0	.2	.0	.0	24.6	
	22+	.0	.0	.0	.0	3.2	.4	.0	.0	.0	.0	3.6	
	TOT %	2.9	1.6	.8	4.2	45.7	12.4	1.7	1.9	.0	6.4	77.7	
TOT OBS		1106											
TOT PCT		4.3	2.1	1.1	5.6	57.8	16.7	2.2	2.3	.0	7.6	100.0	

PERIOD: (PRIMARY) 1910-1977
(OVER-ALL) 1872-1977

APRIL

AREA 0029 COQUIMBO
28.65 72.0W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY MGT	TOTAL OBS
00003	.6	.0	1.2	9.8	27.2	11.6	4.6	.6	.6	.0	56.1	43.9	173
06009	1.9	.0	.6	9.5	27.8	13.3	1.3	2.3	.0	.0	57.0	43.0	158
12015	.5	.5	.0	14.3	31.3	16.5	4.9	1.1	.0	1.6	70.9	29.1	182
18021	1.1	.0	.5	7.9	28.0	14.3	5.8	1.1	.0	1.1	59.8	40.2	189
TOT	7	1	4	73	201	98	30	9	1	5	429	273	702
PCT	1.0	.1	.6	10.4	28.0	14.0	4.3	1.3	.1	.7	61.1	38.9	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.4	.0	.4	2.3	19.8	77.2	263
06009	.7	.3	1.0	1.6	19.5	76.9	307
12015	.0	.4	.0	1.5	19.3	78.8	259
18021	.0	.0	.0	3.9	20.1	76.0	308
TOT	3	2	4	27	224	877	1137
PCT	.3	.2	.4	2.4	19.7	77.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING MGT (FEET, NM >4/8) BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.6	1.7	13.3	42.8	43.9	173
06009	1.9	2.6	13.0	45.5	41.6	154
12015	.6	1.1	15.5	55.8	28.7	181
18021	1.1	1.7	12.2	50.0	37.8	180
TOT	7	12	93	335	260	688
PCT	1.0	1.7	13.5	48.7	37.8	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
75/79	.0	.0	.0	.0	.3	.0	.0	.0	2	.3
70/74	.0	.0	.1	.0	.4	.3	.1	.0	7	.9
65/69	.0	.0	.0	.8	2.9	6.0	5.4	.6	125	15.7
60/64	.0	.0	.0	.4	3.5	20.4	26.2	5.8	447	56.2
55/59	.0	.0	.0	.0	.6	4.9	13.2	7.5	209	26.3
50/54	.0	.0	.0	.0	.0	.1	.5	.5	5	.6
TOTAL	0	0	1	9	61	251	358	115	795	100.0
PCT	.0	.0	.1	1.1	7.7	31.6	45.0	14.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.2	.*	.0	.0	.0	.0
.0	.0	.1	.0	.6	.1	.0	.0	.0	.0
1.3	.2	.3	1.1	7.6	1.9	.5	.6	.0	2.1
2.1	.8	1.1	3.1	33.7	9.5	1.3	.8	.0	3.8
1.1	.9	.1	1.0	16.2	3.8	.3	.5	.0	2.3
.1	.1	.0	.1	.1	.3	.0	.0	.0	.0
4.5	2.0	1.7	5.4	58.5	15.7	2.2	1.9	.0	8.2

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	81	69	66	61	56	55	50	61.4	839
06009	70	67	65	60	56	54	48	60.3	850
12015	77	68	66	61	56	55	53	60.8	829
18021	77	72	69	63	58	56	53	63.5	901
TOT	81	70	68	61	56	55	48	61.6	2819

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.9	6.1	27.7	50.7	14.6	82	213
06009	.0	.5	5.2	26.7	46.1	21.5	84	191
12015	.0	.9	5.2	29.1	48.8	16.0	82	213
18021	.0	2.3	13.3	39.9	35.8	8.7	78	218
TOT	0	10	63	259	378	125	82	835

PERIOD: (PRIMARY) 1910-1977
(OVER-ALL) 1872-1977

APRIL

TABLE 17

AREA 0029 COQUIMBO
28.65 72.0W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	77 80	TOT	W FOG	WD FOG
11/13	.0	.0	.0	.0	.4	.0	.0	3	.0	.4
9/10	.0	.0	.1	.0	.5	.0	.1	6	.0	.8
7/8	.0	.0	.1	.4	.1	.0	.1	6	.0	.8
6	.0	.0	.4	.5	.1	.0	.0	8	.0	1.0
5	.0	.3	.9	.4	.4	.0	.0	15	.0	1.9
4	.0	1.1	1.8	1.3	.1	.0	.0	34	.3	4.0
3	.1	1.6	1.8	.9	.5	.0	.0	39	.0	4.9
2	.1	1.4	2.8	2.3	.1	.1	.0	54	.0	6.8
1	.9	3.4	4.4	1.6	.4	.0	.0	85	.4	10.3
0	1.2	5.4	7.4	3.1	.4	.0	.0	140	.1	17.4
-1	.6	3.4	7.5	2.3	.1	.0	.0	111	.1	13.8
-2	.5	3.6	6.8	1.0	.1	.0	.0	96	.3	11.8
-3	.8	3.8	4.8	.8	.0	.0	.0	80	.3	9.8
-4	.1	2.0	2.8	.1	.0	.0	.0	40	.0	5.0
-5	.1	2.0	2.4	.0	.0	.0	.0	36	.1	4.4
-6	.1	.8	1.4	.0	.0	.0	.0	18	.0	2.3
-7/-8	.1	1.6	.6	.0	.0	.0	.0	19	.0	2.4
-9/-10	.1	.3	.3	.0	.0	.0	.0	5	.0	.6
-11/-12	.0	.1	.1	.0	.0	.0	.0	2	.0	.3
-17/-19	.0	.0	.1	.0	.0	.0	.0	1	.0	.1
TOTAL	39	245	369	116	26	1	2	798	1.5	786
PCT	4.9	20.7	46.2	14.5	3.3	.1	.3	100.0	1.5	98.5

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.7	.0	.0	.0	.0	.7	.0	.1	.0	.0	.0	.0	.1
1-2	.2	2.8	.6	.0	.0	.0	3.6	.4	1.1	.3	.0	.0	.0	1.8
3-4	.0	.3	.3	.0	.0	.0	.6	.0	.3	.0	.0	.0	.0	.3
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.2	.0	.0	.0	.0	.2	.0	.1	.0	.0	.0	.0	.1
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.2	4.0	.8	.0	.0	.0	5.1	.4	1.6	.3	.0	.0	.0	2.3

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.3	.3	.0	.0	.0	.0	.6	.1	1.4	.1	.0	.0	.0	1.6
1-2	.5	.6	.0	.0	.0	.0	1.1	.4	2.0	.1	.0	.0	.0	2.5
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.7	1.0	.0	.0	.0	1.7
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.4
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.8	.8	.0	.0	.0	.0	1.6	.5	4.4	1.4	.3	.0	.0	6.6

PERIOD: (OVER-ALL) 1963-1977

APRIL

AREA 0029 COQUIMBO
28.6S 72.0W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	1.5	4.0	.2	.0	.0	.0	5.7	.1	1.1	.0	.0	.0	.0	1.2
1-2	.9	15.4	5.3	.0	.0	.0	21.6	.1	5.2	.5	.0	.0	.0	5.8
3-4	.0	4.9	12.6	.7	.0	.0	18.1	.0	1.8	1.7	.1	.0	.0	3.6
5-6	.0	.7	7.2	3.0	.0	.0	10.9	.0	.7	1.5	.1	.0	.0	2.3
7	.0	.0	2.0	1.1	.6	.0	3.7	.0	.0	.2	.0	.0	.0	.2
8-9	.0	1.1	1.1	.3	.0	.0	2.5	.0	.3	.0	.0	.0	.0	.3
10-11	.0	.0	.3	.3	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.1	.0	.0	.1
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	2.4	26.1	28.6	5.6	.6	.0	63.3	.2	9.0	3.9	.4	.0	.0	13.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.3	.0	.0	.0	.0	.3	.3	.1	.0	.0	.0	.0	.4	
1-2	.4	1.2	.0	.0	.0	.0	1.6	.1	.8	.0	.0	.0	.0	.9	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.4	1.5	.0	.0	.0	.0	1.9	.4	.8	.0	.0	.0	.0	1.3	95.5

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	8.4	7.6	.3	.0	.0	.0	16.3	
1-2	3.8	28.6	6.5	.0	.0	.0	39.0	
3-4	.3	7.8	15.0	.8	.0	.0	23.7	
5-6	.0	1.6	8.4	3.0	.0	.0	13.1	
7	.0	.0	2.2	1.1	.5	.0	3.8	
8-9	.0	1.6	1.1	.3	.0	.0	3.0	
10-11	.0	.0	.3	.5	.0	.0	.8	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.3	.0	.0	.3	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	12.5	47.1	33.8	6.0	.5	.0	100.0	367

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.5	7.2	9.9	5.6	4.3	1.3	.8	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	195	4
6-7	.0	1.8	6.4	11.8	5.1	3.1	1.5	.5	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	193	6
8-9	.0	.0	1.3	3.8	4.8	2.5	1.3	.5	.7	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	92	7
10-11	.0	.2	.8	2.1	2.6	1.8	1.0	.7	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	58	7
12-13	.0	.0	.8	1.0	.3	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	16	5
>13	.0	.0	.0	.0	.3	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	8
UNDET	2.0	.5	1.0	1.2	.3	1.3	.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	41	4
TOTAL	27	59	123	159	108	70	29	14	16	3	0	0	0	0	0	0	0	0	0	608	5
PCT	4.4	9.7	20.2	26.2	17.8	11.5	4.8	2.3	2.6	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1900-1977
(OVER-ALL) 1855-1977

MAY

AREA 0029 COQUIMBO
28.55 72.0W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG MEA
N	.0	1.0	5.2	.0	.0	.0	.0	6.3	1.4	.0	2.8	.0	2.4	.0	87.1
NE	.0	.6	.6	.0	.0	.0	.0	1.3	.0	.0	2.5	2.5	3.2	.0	90.4
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.0	2.5	.0	.0	.0	.0	2.5	.0	.0	1.3	.0	3.8	.0	92.5
S	.0	.0	.3	.0	.0	.0	.0	.3	.5	1.0	2.9	.0	2.2	.0	93.1
SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.9	.0	.9	.0	95.2
W	6.1	.0	3.0	.0	.0	.0	.0	9.1	.0	.0	12.1	.0	.0	.0	78.8
NW	.0	2.9	4.3	.0	.0	.0	.0	7.2	2.9	.0	2.9	.0	.0	.0	87.1
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.6	2.6	.0	2.6	.0	92.3
TOT PCT	.1	.3	1.1	.0	.0	.0	.0	1.5	.5	.7	3.0	.1	2.0	.0	92.1
TOT OBS:	732														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG MEA
00003	.0	1.1	.5	.0	.0	.0	.0	1.6	.5	.5	2.2	.0	2.2	.0	93.0
06009	.0	.0	.5	.0	.0	.0	.0	.5	.5	2.2	2.2	.0	1.1	.0	93.5
12015	.5	.0	.5	.0	.0	.0	.0	1.1	1.6	.0	4.7	.5	1.6	.0	90.5
18021	.0	.0	2.6	.0	.0	.0	.0	2.6	.0	.0	3.1	.0	3.1	.0	91.3
TOT PCT	.1	.3	1.1	.0	.0	.0	.0	1.5	.7	.7	3.0	.1	2.0	.0	92.1
TOT OBS:	757														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	2.2	5.2	1.7	.5	*	.0		9.6	7.9		6.5	30.0	7.4	11.5	9.4	22.7	12.4	8.2
NE	1.4	2.1	.6	.1	.0	.0		4.2	6.5		3.8	6.7	3.9	3.8	5.2	9.1	4.8	2.4
E	.8	1.9	.2	.0	.0	.0		2.9	5.3		3.1	.0	1.6	3.1	4.4	9.1	2.4	2.9
SE	1.5	4.8	3.3	1.0	.0	.0		10.7	10.6		9.6	.0	12.5	11.9	12.9	5.7	9.4	8.4
S	3.9	19.5	18.2	4.1	.2	.0		45.9	11.8		48.0	33.3	47.4	46.7	45.9	39.8	42.1	49.2
SW	1.8	5.9	2.5	.4	.0	.0		10.6	8.8		12.9	13.3	10.8	8.9	9.8	4.5	9.9	11.8
W	1.1	1.8	.1	.1	*	.0		3.1	5.2		3.5	.0	1.6	1.9	2.4	4.5	4.4	4.1
NW	1.4	3.0	.9	.3	.1	.0		5.6	7.9		3.9	3.3	4.8	4.7	3.0	4.5	9.1	6.5
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	7.5							7.5	.0		8.7	13.3	10.0	7.5	7.0	.0	5.6	6.8
TOT OBS	640	1306	815	187	8	0	2956		9.3		503	15	522	359	501	22	732	302
TOT PCT	21.7	44.2	27.6	6.3	.3	.0		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	5.2	3.5	.8	.2	.0		9.6	7.9	7.1	9.1	9.9	11.1	
NE	2.8	1.3	.1	.1	.0		4.2	6.5	3.9	3.9	5.4	4.1	
E	2.2	.7	.0	.0	.0		2.9	5.3	3.0	2.2	4.6	2.5	
SE	3.9	4.3	2.2	.3	.0		10.7	10.6	9.4	12.2	12.6	9.1	
S	12.3	22.3	4.6	1.7	.0		45.9	11.8	47.5	47.1	65.6	44.2	
SW	4.9	4.4	1.2	.1	.0		10.6	8.8	12.9	10.0	9.6	10.4	
W	2.5	.5	.1	.0	.0		3.1	5.2	3.4	1.7	2.5	4.3	
NW	3.0	2.1	.4	.1	.0		5.6	7.9	3.9	4.8	3.1	8.4	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	7.5						7.5		8.9	9.0	6.7	5.9	
TOT OBS	1302	1152	426	76	0	2956		9.3	518	581	523	1034	
TOT PCT	44.0	39.0	14.4	2.6	.0		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1855-1977

MAY

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28.55 72.0W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

MO/H	CALM	1-3	4-10	11-21	22-33	34-47	48+	MEAN	PCT FREQ	TOTAL OBS
0000	8.9	13.3	45.0	27.4	5.2	.2	.0	9.0	100.0	518
0600	9.0	14.4	43.2	26.9	6.4	.1	.0	9.0	100.0	881
1200	6.7	14.7	42.8	29.1	6.5	.2	.0	9.3	100.0	523
1800	5.9	14.1	45.3	27.5	6.8	.5	.0	9.6	100.0	1034
TOT	221	419	1306	815	187	8	0	9.3		2956
PCT	7.5	14.2	44.2	27.6	6.3	.3	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 9	TOTAL DBSCD	MEAN CLOUD COVER
N	1.4	.7	2.1	5.8		6.3
NE	.8	.5	.6	2.8		6.1
E	.5	.2	.7	1.3		6.0
SE	1.0	.5	1.8	1.0		5.6
S	16.0	5.7	13.1	18.2		4.9
SW	2.8	1.5	3.0	4.7		5.1
W	.7	.5	.3	.8		4.4
NW	.4	1.1	1.6	1.9		5.8
VAR	.0	.0	.0	.0		.0
CALM	.7	.5	.7	3.6		6.3
TOT OBS	144	65	141	241	591	5.3
TOT PCT	24.4	11.0	23.9	40.8	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH > 4/8)
AND OCCURRENCE OF NH < 5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH < 5/8 ANY HGT	TOTAL OBS
N	.0	.3	.1	.8	3.2	1.3	.0	.0	.2	.6	3.3	
NE	.0	.0	.0	.3	1.7	.6	.0	.0	.0	.1	1.9	
E	.0	.2	.0	.3	1.0	.3	.1	.0	.0	.0	.7	
SE	.0	.0	.2	.5	1.7	.7	.1	.0	.0	.0	2.0	
S	.5	.3	.3	5.2	14.7	4.2	1.4	.3	.0	.2	25.9	
SW	.0	.0	.3	1.4	3.6	1.1	.7	.0	.0	.0	4.8	
W	.0	.0	.2	.3	.0	.1	.0	.2	.0	.0	1.5	
NW	.0	.0	.2	.3	.8	1.2	.2	.0	.0	.2	2.1	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	1.0	1.5	.3	.8	.2	.2	.0	1.4	
TOT OBS	3	5	8	60	167	58	20	4	2	6	258	591
TOT PCT	.5	.8	1.4	10.2	28.3	9.8	3.4	.7	.3	1.0	43.7	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH > 4/8) AND VSBY (NM)

CEILING (FEET)	OR >10	OR >5	OR >2	VSBY (NM) OR >1	OR >1/2	OR >1/4	OR >50YD	OR >0
OR >6500	.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3
OR >5000	1.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0
OR >3500	4.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
OR >2000	13.6	15.4	15.4	15.4	15.4	15.4	15.4	15.4
OR >1000	36.7	43.0	43.3	43.3	43.3	43.3	43.3	43.3
OR >600	43.3	52.7	53.6	53.6	53.6	53.6	53.6	53.6
OR >300	44.0	53.4	54.7	54.7	54.9	54.9	54.9	54.9
OR >150	44.1	53.7	55.4	55.5	55.7	55.7	55.7	55.7
OR >0	44.1	53.7	55.4	55.5	55.7	55.9	56.0	56.0
TOTAL	267	325	335	336	337	338	339	339

TOTAL NUMBER OF OBS: 605

PCT FREQ NH < 5/8: 44.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8 DBSCD	TOTAL OBS
	14.2	8.3	8.7	8.0	4.1	4.1	7.8	10.0	34.5	641

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL DBS
<1/2	PCP .0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP .0	.1	.0	.0	.4	*	.0	.0	.0	.0	.5	
	TOT % .0	.1	.0	.0	.4	*	.0	.0	.0	.0	.5	
1/2<1	PCP .0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP .0	.0	.0	.0	.0	.3	.1	.1	.0	.0	.5	
	TOT % .0	.0	.0	.0	.0	.3	.1	.1	.0	.0	.5	
1<2	PCP .0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	
	NO PCP .1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	TOT % .1	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3	
2<5	PCP .3	.0	.0	.1	.0	.0	.0	.0	.0	.0	.4	
	NO PCP .1	.0	.1	.0	1.0	.3	.1	.0	.0	.1	1.9	
	TOT % .4	.0	.1	.1	1.0	.3	.1	.0	.0	.1	2.3	
5<10	PCP .2	*	.0	.0	.1	.0	.2	.2	.0	.0	.8	
	NO PCP 2.2	2.1	.4	.4	6.8	1.6	.4	.3	.0	1.9	16.2	
	TOT % 2.4	2.1	.4	.4	7.0	1.6	.6	.5	.0	1.9	17.0	
10+	PCP .1	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	NO PCP 6.8	3.1	1.7	4.9	44.8	9.1	1.4	4.0	.0	3.1	79.1	
	TOT % 6.9	3.2	1.7	4.9	44.8	9.1	1.4	4.0	.0	3.3	79.3	
TOT DBS TOT PCT	9.9	5.4	2.3	5.5	53.2	11.4	2.3	4.8	.0	5.4	100.0	728

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.1	.0	.0	.1	.0	.0	.0	.0	.3	.5	
	4-10	.0	.0	.1	.0	.1	.1	.0	.0	.0	.0	.2	
	11-21	.0	.0	.0	.0	.2	*	.0	.0	.0	.0	.2	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.1	.1	.0	.3	.1	.0	.0	.0	.3	.9	
1/2<1	0-3	.0	.0	.0	.0	.0	.2	.0	.1	.0	.0	.1	
	4-10	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.2	.1	.1	.0	.0	.4	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.1	.0	.1	.2	
	4-10	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	11-21	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.0	.0	.0	.1	.0	.0	.1	.0	.1	.4	
2<5	0-3	.1	.0	.1	.1	.0	.1	.0	.0	.0	.2	.6	
	4-10	.2	.0	.1	.0	.3	.2	.1	.0	.0	.0	.9	
	11-21	.0	.0	.0	.0	.3	.1	.0	.0	.0	.0	.5	
	22+	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	
	TOT %	.3	.0	.2	.1	.9	.4	.1	.0	.0	.2	2.1	
5<10	0-3	.4	.4	.0	.1	1.0	.5	.2	.1	.0	.3	4.8	
	4-10	.9	.6	.3	.3	3.3	1.1	.4	.3	.0	.3	7.5	
	11-21	.5	.5	.0	*	2.5	.3	.0	.1	.0	.0	4.1	
	22+	.1	.2	.0	*	.4	.1	.0	.0	.0	.0	.8	
	TOT %	2.0	1.6	.3	.4	7.3	2.1	.3	.4	.0	2.3	17.1	
10+	0-3	.7	.6	.2	.8	1.4	1.1	.6	.3	.0	4.3	10.0	
	4-10	4.7	1.9	1.3	2.2	17.0	6.1	1.2	2.4	.0	.0	36.6	
	11-21	.9	.4	.2	1.2	20.5	3.4	.0	.6	.0	.0	27.3	
	22+	.1	.1	.0	.1	4.4	.3	.0	.0	.0	.0	.1	
	TOT %	6.4	2.9	1.7	4.3	43.4	10.9	1.6	3.3	.0	4.3	79.0	
TOT OBS													986
TOT PCT		8.8	4.6	2.3	4.8	52.2	13.6	2.3	3.9	.0	7.2	100.0	

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1855-1977

MAY

TABLE 10

AREA 0029 COQUIMBO
28.55 72.0W

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET/NH >4/8) AND
OCCURRENCE OF NH <3/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <3/8 ANY HGT	TOTAL OBS
00003	.6	1.9	1.3	7.7	21.3	11.0	1.9	.6	.6	.0	47.1	52.9	155
06009	.7	.7	.7	7.6	26.9	8.3	4.1	.7	.0	1.4	51.0	49.0	145
12015	.6	.6	2.5	13.4	34.4	8.3	4.5	1.3	.0	.6	66.2	33.8	157
18021	.0	.0	.6	10.6	27.3	11.8	3.1	.0	.6	1.9	55.9	44.1	161
TOT	3	5	8	61	170	61	21	4	2	6	341	277	618
PCT	.5	.8	1.3	9.9	27.5	9.9	3.4	.6	.3	1.0	55.2	44.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NH) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.4	2.2	15.1	82.3	232
06009	1.5	.4	1.1	1.8	17.5	77.8	275
12015	2.2	.9	.0	3.0	16.9	77.1	231
18021	.0	.4	.0	2.2	18.3	79.1	273
TOT	9	4	4	23	172	799	1011
PCT	.9	.4	.4	2.3	17.0	79.0	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NH) AND/OR
CEILING HGT (FEET/NH >4/8) BY HOUR

HOUR (GMT)	<150 <50YD	<600 1	<1000 45	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	.0	3.3	11.9	35.8	52.3	151
06009	.7	2.8	11.3	41.8	46.8	141
12015	.6	5.8	20.5	48.1	31.4	136
18021	.0	1.3	12.7	45.9	41.4	157
TOT	2	20	86	260	259	605
PCT	.3	3.3	14.2	43.0	42.8	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
70/74	.0	.0	.0	.1	.7	.3	.0	.1	9	1.3
65/69	.0	.0	.0	.0	1.3	2.4	1.7	.7	43	6.2
60/64	.0	.0	.0	.7	3.3	13.8	16.7	6.6	286	41.2
55/59	.0	.0	.0	.0	1.7	11.5	25.1	10.1	336	48.4
50/54	.0	.0	.0	.0	.4	1.3	1.2	.0	20	2.9
TOTAL	0	0	0	6	49	198	311	130	694	100.0
PCT	.0	.0	.0	.9	7.1	28.5	44.8	18.7		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
70/74	.0	.3	.0	.0	1.0	.0	.0	.0	.0	.0
65/69	.7	.3	.1	.4	2.8	.1	.4	.9	.0	.4
60/64	3.7	1.9	1.1	2.8	20.0	6.4	.8	1.8	.0	2.6
55/59	5.1	1.9	.9	1.9	28.1	5.6	.6	1.2	.0	3.2
50/54	.0	.0	.1	.1	1.8	.5	.1	.0	.0	.1
TOTAL	9.5	4.4	2.2	5.2	53.7	12.6	2.1	4.0	.0	6.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	90%	5%	1%	MIN	MEAN	TOTAL OBS
00003	81	66	54	59	55	54	52	59.3	525
06009	78	65	63	58	54	53	52	59.5	898
12015	73	66	64	59	54	52	52	59.8	521
18021	78	71	67	61	56	55	50	61.6	978
TOT	81	69	65	59	55	53	50	59.7	2922

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	4.5	28.5	46.4	20.7	83	179
06009	.0	.6	4.5	22.3	50.8	21.8	83	179
12015	.0	1.1	6.3	27.8	42.6	22.2	83	176
18021	.0	1.6	14.0	33.3	39.2	11.8	79	186
TOT	0	6	53	202	322	137	82	720

MAY

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1855-1977

TABLE 17

AREA 0029 COQUIMBO
28.55 72.0WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	65 68	69 72	73 76	77 80	81 84	TOT	W FOG	WD FOG
14/16	.0	.0	.0	.0	.1	.1	.0	.0	.0	2	.0	.3
17/19	.0	.0	.1	.3	.1	.3	.1	.0	.0	7	.0	1.0
9/10	.0	.0	.1	.3	.3	.4	.1	.0	.0	9	.1	1.2
7/8	.0	.0	.3	.1	.1	.0	.0	.0	.0	4	.0	.6
6	.0	.0	.6	.4	.1	.0	.0	.1	.0	9	.0	1.3
5	.0	.0	.9	.9	.6	.1	.0	.0	.0	17	.1	2.3
4	.0	.1	1.2	.9	.3	.0	.0	.0	.1	18	.1	2.5
3	.0	.0	1.9	1.0	.3	.0	.0	.0	.0	22	.0	3.2
2	.0	.7	3.4	3.8	.6	.0	.1	.0	.0	59	.3	8.3
1	.0	1.0	2.5	2.8	.3	.0	.0	.0	.0	45	.7	5.9
0	.0	1.3	6.6	6.1	1.0	.0	.1	.0	.0	104	.1	15.1
-1	.1	3.1	8.2	5.4	1.0	.0	.0	.0	.0	122	.3	17.6
-2	.1	2.0	7.2	4.1	.1	.3	.1	.0	.0	96	.6	13.5
-3	.0	2.0	4.5	2.6	.8	.0	.0	.0	.0	67	.1	9.7
-4	.0	.7	4.4	.9	.0	.0	.0	.0	.0	41	.1	5.9
-5	.1	1.9	1.9	1.0	.0	.0	.0	.0	.0	34	.1	4.8
-6	.0	.6	.3	.4	.0	.0	.0	.0	.0	9	.1	1.2
-7/-8	.0	.6	1.3	.1	.0	.0	.0	.0	.0	14	.1	1.9
-9/-10	.0	.1	.1	.0	.0	.0	.0	.0	.0	2	.0	.3
-11/-13	.0	.0	.3	.0	.0	.0	.0	.0	.0	2	.0	.3
TOTAL	3		98	214	39	9		1		683		
PCT	.4	14.3	45.8	31.3	5.7	1.3	.7	.1	.1	100.0	3.2	96.8

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	1.2	.6	.0	.0	.0	.0	1.8	.8	1.1	.0	.0	.0	.0	1.9
1-2	.3	4.5	.0	.0	.0	.0	5.8	.3	1.3	.1	.0	.0	.0	1.9
3-4	.0	3.3	1.7	.0	.0	.0	5.0	.0	.3	.7	.0	.0	.0	.9
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.5	8.4	2.6	.0	.0	.0	12.5	1.2	2.8	.8	.3	.0	.0	5.1

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	1.3	.4	.0	.0	.0	.0	1.7
1-2	.3	.3	.3	.0	.0	.0	1.0	.7	2.2	.3	.0	.0	.0	3.1
3-4	.0	.3	.0	.0	.0	.0	.3	.0	.7	.6	.1	.0	.0	1.3
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.4	.2	.0	.0	.0	.6
7	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.3	.7	.3	.0	.0	.0	1.3	1.9	3.7	1.3	.1	.0	.0	7.0

PERIOD: (OVER-ALL) 1963-1977

MAY

AREA 0029 COQUIMBO
28.55 72.0W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOT PCT
<1	.8	2.5	.7	.0	.0	.0	3.3	.0	1.1	.0	.0	.0	.0	1.1	
1-2	.9	12.7	3.3	.0	.0	.0	16.9	1.1	4.2	.1	.0	.0	.0	5.3	
3-4	.0	5.8	10.8	.6	.0	.0	17.1	.3	1.9	.7	.0	.0	.0	2.9	
5-6	.3	1.6	6.4	.3	.0	.0	8.7	.0	.0	.4	.0	.0	.0	.4	
7	.0	.0	3.3	.0	.0	.0	3.3	.0	.3	.2	.0	.0	.0	.5	
8-9	.0	.0	.9	.3	.0	.0	1.2	.0	.0	.0	.1	.0	.0	.1	
10-11	.0	.0	.0	.7	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	2.0	22.5	24.7	1.8	.0	.0	51.0	1.4	7.3	1.3	.1	.0	.0	10.3	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOT PCT
<1	.0	.0	.0	.0	.0	.0	.0	.7	.3	.0	.0	.0	.0	1.0	
1-2	.3	.6	.0	.0	.0	.0	.9	.0	1.4	1.0	.0	.0	.0	2.4	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.8	1.0	.0	.0	.0	1.8	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.3	.6	.0	.0	.0	.0	.9	.7	2.3	2.3	.0	.0	.0	5.3	93.7

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	12.6	5.8	.0	.0	.0	.0	18.4	
1-2	4.2	27.2	5.8	.0	.0	.0	37.2	
3-4	.3	12.6	14.9	.6	.0	.0	28.5	
5-6	.3	1.9	7.1	.3	.0	.0	9.7	
7	.0	.3	3.6	.0	.0	.0	3.9	
8-9	.0	.0	1.0	.3	.0	.0	1.3	
10-11	.0	.0	.0	1.0	.0	.0	1.0	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	17.5	47.9	32.4	2.3	.0	.0	100.0	309

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.5	5.6	8.6	3.8	1.3	.8	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	114	3
6-7	.2	1.9	5.2	9.2	5.0	3.3	.8	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	135	5
8-9	.0	.2	3.8	8.2	4.2	3.8	1.3	1.0	1.1	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	125	7
10-11	.0	.2	.4	1.0	2.9	1.3	2.1	1.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	48	8
12-13	.0	.0	.2	.4	.6	.4	1.3	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	8
>13	.0	.0	.0	.6	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	6
INDET	3.3	4.4	3.3	2.1	.8	.6	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	78	3
TOTAL	26	64	112	132	77	53	33	14	9	2	0	0	0	0	0	0	0	0	0	522	5
PCT	5.0	12.3	21.5	25.3	14.8	10.2	6.3	2.7	1.7	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1855-1977

JUNE

TABLE 1

AREA 0029 COQUIMBO
28.55 72.2W

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							ND SIG WEA
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG NO PCPN	FOG NO PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	
N	5.1	.8	8.0	.0	.0	.0	.0	12.9	7.5	.0	1.8	.0	.0	.0	77.9
NE	7.0	.6	.6	.0	.0	.0	.0	8.2	1.8	.0	.6	.0	.0	.0	89.5
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	1.0	.0	.5	.0	.0	.0	.0	1.5	2.0	.0	4.4	.0	.0	.0	92.2
S	.3	.2	1.5	.0	.0	.0	.0	1.8	.5	.0	1.6	.0	1.0	.2	94.9
SW	.0	.0	2.1	.0	.0	.0	.0	2.1	.9	.0	1.7	.0	1.4	.0	93.9
W	.0	.0	.0	.0	.0	.0	.0	.0	3.5	.0	.0	.0	3.5	.0	93.0
NW	6.3	.0	3.1	.0	.0	.0	.0	6.3	3.1	.0	3.1	.0	.0	.0	87.4
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.4	.0	.0	.0	97.6
TOT PCT	1.4	.2	2.1	.0	.0	.0	.0	3.4	1.6	.0	1.8	.0	.8	.1	92.3
TOT OBS:	856														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							ND SIG WEA
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG NO PCPN	FOG NO PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	
00003	1.0	.5	1.0	.0	.0	.0	.0	2.5	1.0	.0	1.0	.0	.0	.0	95.4
06009	2.4	.0	3.4	.0	.0	.0	.0	5.3	1.4	.0	1.4	.0	.5	.0	91.3
12015	2.2	.4	3.1	.0	.0	.0	.0	4.9	3.1	.0	3.5	.0	.9	.0	87.6
18021	1.2	.4	.8	.0	.0	.0	.0	2.4	.8	.0	2.8	.0	1.6	.4	92.1
TOT PCT	1.7	.3	2.0	.0	.0	.0	.0	3.7	1.6	.0	2.3	.0	.8	.1	91.5
TOT OBS:	884														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21	
N	2.6	6.8	3.8	1.1	.2	.0		14.6	10.1		14.7	13.9	13.7	16.6	14.4	10.4	14.2	15.2
NE	1.3	2.9	.8	.1	.1	.0		5.3	7.9		4.5	2.8	5.0	4.6	6.1	8.3	6.1	4.8
E	.8	1.2	.1	.0	.0	.0		2.1	5.2		1.5	.0	1.4	3.0	3.0	2.1	2.5	.9
SE	1.3	4.4	4.0	1.4	.0	.0		11.1	11.7		8.5	16.7	10.7	13.0	13.7	8.3	10.3	11.6
S	3.3	15.2	17.0	4.9	.2	.0		40.5	12.7		44.0	38.9	43.3	34.9	40.1	56.3	39.1	40.1
SW	1.3	4.4	3.1	.7	.0	.0		9.5	10.4		11.6	11.1	10.0	9.1	6.9	10.4	10.4	7.6
W	.6	1.7	.5	.1	.0	.0		2.9	7.4		2.6	8.3	2.3	3.1	2.3	2.1	3.0	4.3
NW	1.2	3.8	1.5	.5	.1	.0		7.0	9.3		5.2	2.8	6.6	7.1	5.9	2.1	8.7	8.8
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	6.9							6.9	.0		7.2	5.6	6.9	8.5	7.5	.0	5.9	6.6
TOT OBS	650	1355	1032	294	23	1	3355		10.3		553	18	564	389	558	24	903	346
TOT PCT	19.4	40.4	30.8	8.8	.7	*		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	06	12	18	21
N	6.1	5.7	2.3	.5	*				14.7	14.9	14.2	14.5	
NE	3.1	1.7	.5	.1	.1				4.5	4.8	6.2	5.7	
E	1.5	.6	.0	.0	.0				1.5	2.0	2.9	2.0	
SE	3.6	4.4	2.9	.9	.0				8.8	11.7	13.5	10.6	
S	9.4	18.7	10.8	1.5	*				40.5	12.7	43.8	39.9	40.8
SW	3.6	3.9	1.9	.1	*				9.5	10.4	11.6	9.7	7.1
W	1.7	.9	.2	.0	.0				2.9	7.4	2.8	2.7	2.3
NW	3.1	3.1	.7	.2	.0				7.0	9.3	5.2	6.8	5.7
VAR	.0	.0	.0	.0	.0				.0	.0	.0	.0	.0
CALM	6.9								7.2	7.6	7.2	6.1	
TOT OBS	1307	1309	843	91	5	3355			571	953	582	1249	
TOT PCT	39.0	39.0	19.2	2.7	.1				100.0	100.0	100.0	100.0	

JUNE

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1855-1977AREA 0029 COQUIMBO
28.55 72.2W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)							MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47	48+				
00003	7.2	12.4	40.5	31.0	7.5	1.4	.0	10.5	100.0	571	
06009	7.6	13.0	39.7	30.4	9.1	.1	.1	10.1	100.0	953	
12015	7.2	10.5	40.7	33.0	8.2	.3	.0	10.3	100.0	582	
18021	6.1	13.1	40.8	29.9	9.3	1.0	.0	10.4	100.0	1249	
TOT	231	419	1355	1032	294	23	1	10.3		3355	
PCT	6.9	12.5	40.4	30.8	8.8	.7	#		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	1.9	.6	1.5	7.1		6.3
NE	.6	.3	1.0	2.9		6.3
E	.1	.0	.6	.4		6.4
SE	.9	.5	1.8	2.1		5.8
S	16.7	9.8	12.6	14.4		4.5
SW	4.1	1.9	2.7	3.2		4.4
W	.9	.8	.7	.7		4.2
NW	.6	.4	.7	1.6		5.9
VAR	.0	.0	.0	.0		.0
CALM	1.0	.1	1.5	2.9		6.0
TOT OBS	182	99	158	241	680	5.0
TOT PCT	26.8	14.6	23.2	35.4	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.3	.1	1.4	4.1	.9	1.0	.0	.0	.0	3.4	
NE	.0	.0	.0	.9	1.9	.5	.2	.0	.0	.0	1.4	
E	.0	.0	.0	.1	.4	.1	.1	.0	.0	.0	.3	
SE	.0	.0	.1	.4	1.5	.6	.3	.0	.0	.0	2.4	
S	.6	1.1	1.9	4.9	9.6	4.2	2.2	.1	.1	.3	29.5	
SW	.2	.0	.2	1.0	1.6	1.5	.3	.0	.0	.1	6.8	
W	.0	.0	.0	.3	.3	.3	.1	.0	.0	.0	2.1	
NW	.0	.0	.0	.6	.9	.2	.0	.0	.0	.0	1.6	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.1	.3	2.8	.4	.0	.0	.0	.0	1.8	
TOT OBS	5	3	17	68	157	61	29	1	1	3	335	680
TOT PCT	.7	.4	2.5	10.0	23.1	9.0	4.3	.1	.1	.4	49.3	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.6	.6	.6	.6	.6	.6	.6	.6
= OR >5000	.7	.7	.7	.7	.7	.7	.7	.7
= OR >3500	4.6	4.9	4.9	4.9	4.9	4.9	4.9	4.9
= OR >2000	11.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
= OR >1000	30.9	36.7	37.0	37.0	37.1	37.1	37.1	37.1
= OR >600	38.6	46.0	46.8	46.8	47.0	47.0	47.0	47.0
= OR >300	39.7	47.8	49.3	49.3	49.4	49.4	49.4	49.4
= OR >150	39.9	48.0	49.7	49.7	49.9	49.9	49.9	49.9
= OR >0	40.0	48.3	50.0	50.3	50.6	50.6	50.6	50.6
TOTAL	277	334	346	348	350	350	350	350

TOTAL NUMBER OF OBS: 692

PCT FREQ NH <5/8: 49.4

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
15.5	7.0	9.9	9.1	7.5	3.9	8.6	9.3	28.7	.6	724

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1855-1977

JUNE

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.1	.1	.1	.0	.0	.0	.1	.5	
	TOT %	.0	.0	.0	.1	.1	.1	.0	.0	.0	.1	.5	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.2	*	.0	.0	.2	*	.1	.1	.0	.0	.6	
	TOT %	.2	*	.0	.0	.2	*	.1	.1	.0	.0	.6	
2<5	PCP	.6	*	.0	.1	.4	.1	.0	.1	.0	.0	1.3	
	NO PCP	.4	*	.0	.2	.3	*	.2	.1	.0	.1	1.4	
	TOT %	1.0	.1	.0	.3	.7	.1	.2	.2	.0	.1	2.7	
5<10	PCP	.4	.3	.0	.0	.1	.1	.0	.1	.0	.0	1.1	
	NO PCP	2.5	1.2	.1	.6	6.0	1.5	.1	.6	.0	.7	13.2	
	TOT %	2.8	1.5	.1	.6	6.1	1.6	.1	.8	.0	.7	14.4	
10+	PCP	.5	.1	.0	.0	.4	*	.0	.0	.0	.0	1.1	
	NO PCP	6.8	3.3	1.3	4.9	44.3	10.5	3.0	2.6	.0	4.0	80.7	
	TOT %	7.4	3.4	1.3	4.9	44.8	10.5	3.0	2.6	.0	4.0	81.8	
TOT OBS													856
TOT PCT		11.4	5.0	1.5	6.0	51.9	12.4	3.3	3.7	.0	4.9	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	4-10	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0	.2	
1/2<1	0-3	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1	.2	
	4-10	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.2	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.1	.1	.1	.0	.0	.0	.1	.3	
1<2	0-3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	4-10	.1	*	.0	.0	.1	*	*	*	.0	.0	.3	
	11-21	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	*	.0	.0	.2	*	*	*	.0	.0	.5	
2<5	0-3	.1	*	.0	.0	.1	.1	.0	.0	.0	.3	.5	
	4-10	.2	.0	.0	.2	.1	.1	.1	.1	.0	.0	.9	
	11-21	.3	*	.0	*	.4	.1	.0	.0	.0	.0	.9	
	22+	.1	.0	.0	.3	.3	*	.0	.0	.0	.0	.4	
	TOT %	.7	*	.0	.2	.9	.3	.1	.1	.0	.3	2.7	
5<10	0-3	.4	.3	*	.1	.5	.2	.0	.2	.0	1.6	3.4	
	4-10	1.3	.7	.1	.2	1.9	.8	.1	.3	.0	.0	5.4	
	11-21	1.4	.4	.0	.1	3.1	.9	.0	.1	.0	.0	6.0	
	22+	.4	.1	.0	.1	.7	*	.0	.0	.0	.0	1.4	
	TOT %	3.3	1.6	.1	.5	6.1	1.9	.1	.6	.0	1.4	16.1	
10+	0-3	.7	.4	.3	1.0	2.2	.6	.2	.4	.0	5.8	11.6	
	4-10	4.7	3.1	1.4	1.7	16.5	5.3	2.0	1.4	.0	.0	36.0	
	11-21	2.7	.7	.0	1.5	17.3	4.2	.7	.4	.0	.0	27.6	
	22+	.1	.0	.0	.2	4.4	.5	.0	.0	.0	.0	5.1	
	TOT %	8.2	4.3	1.7	4.4	40.3	10.5	2.8	2.1	.0	5.8	80.2	
TOT OBS													1176
TOT PCT		12.6	6.0	1.8	5.3	47.7	12.8	3.1	3.0	.0	7.7	100.0	

JUNE

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1855-1977AREA 0029 COQUIMBO
28.55 72.2W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	1.3	.0	1.9	8.8	16.9	7.5	3.8	.6	.0	.6	41.3	58.8	160
06009	.6	.0	1.9	7.6	21.7	10.2	4.5	.0	.0	.6	47.1	52.9	157
12015	.5	.5	2.7	12.4	29.7	10.8	3.8	.0	.5	.5	61.6	38.4	185
18021	.5	1.0	3.0	9.4	22.7	6.4	4.4	.0	.0	.0	47.3	52.7	203
TOT	5	3	17	68	162	61	29	1	1	3	350	355	705
PCT	.7	.4	2.4	9.6	23.0	8.7	4.1	.1	.1	.4	49.6	50.4	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.4	2.3	13.4	83.9	261
06009	.6	.3	1.0	2.2	17.9	77.9	312
12015	.0	1.8	.4	4.0	17.2	76.6	274
18021	.3	.6	.8	2.5	14.8	81.0	357
TOT	3	8	8	33	191	961	1204
PCT	.2	.7	.7	2.7	15.9	79.8	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOURL (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	1.3	3.1	12.6	29.6	57.9	159
06009	.7	2.6	11.1	37.9	51.0	153
12015	.6	4.4	17.1	45.9	37.0	181
18021	.5	4.5	15.6	33.2	51.3	199
TOT	5	26	99	254	339	692
PCT	.7	3.8	14.3	36.7	49.0	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
70/74	.0	.0	.0	.0	.0	.0	.0	.1	1	.1
65/69	.0	.0	.0	.0	.7	.4	.9	.7	20	2.7
60/64	.0	.0	.0	.0	4.2	8.6	11.3	9.5	205	27.6
55/59	.0	.0	.0	.5	2.7	17.4	29.4	12.7	465	62.7
50/54	.0	.0	.0	.0	.3	1.1	3.4	2.2	51	6.9
TOTAL	0	0	0	4	58	204	334	142	742	100.0
PCT	.0	.0	.0	.5	7.8	27.5	45.0	19.1		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
70/74	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
65/69	.3	.3	.0	.1	.9	.3	.3	.4	.0	.0
60/64	4.7	1.4	.1	2.0	11.6	3.7	1.1	1.5	.0	1.3
55/59	5.6	3.0	1.1	3.6	36.2	5.9	1.9	1.7	.0	3.6
50/54	.7	.6	.2	.6	3.9	.7	.0	.0	.0	.3
TOTAL	11.3	5.3	1.4	6.4	52.6	10.8	3.4	3.6	.0	5.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	75	66	63	58	53	51	49	57.9	575
06009	68	63	61	57	53	50	46	56.9	946
12015	72	65	62	57	53	50	48	57.3	577
18021	76	68	65	60	55	53	49	59.9	1195
TOT	76	67	64	58	53	51	46	58.2	3293

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.1	5.4	23.1	51.6	18.8	83	186		
06009	.0	.6	5.7	25.6	48.9	19.3	83	176		
12015	.0	.0	4.7	26.9	43.0	25.4	84	193		
18021	.0	.5	14.6	33.5	38.3	13.1	80	206		
TOT	0	4	59	209	344	145	83	761		

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1855-1977

JUNE

TABLE 17

AREA 0029 COQUIMBO
28.5S 72.2W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	65 68	69 72	73 76	TOT	H FOG	HO FOG
11/13	.0	.0	.0	.0	.1	.1	.0	2	.1	.1
9/10	.0	.0	.1	.0	.0	.1	.0	2	.0	.3
7/8	.0	.0	.0	.1	.5	.0	.0	5	.1	.5
6	.0	.0	.3	.1	.5	.0	.0	7	.0	.9
5	.0	.0	.6	.6	.1	.0	.0	11	.0	1.4
4	.0	.5	.6	1.0	.5	.0	.0	21	.0	2.7
3	.1	.5	2.0	1.5	.4	.0	.1	37	.0	4.7
2	.0	1.0	3.7	2.2	.4	.0	.0	57	.0	7.3
1	.0	2.9	3.3	2.3	.4	.0	.0	70	.1	8.8
0	.1	4.1	8.5	2.7	.0	.0	.0	120	.4	15.0
-1	.0	4.6	7.6	4.0	.4	.0	.0	129	.0	16.5
-2	.0	4.0	9.3	1.7	.0	.0	.0	117	.4	14.6
-3	.0	3.3	4.2	1.2	.0	.0	.0	68	.1	8.6
-4	.3	3.6	4.0	.5	.0	.0	.0	65	.3	8.1
-5	.0	1.5	3.1	.3	.0	.0	.0	38	.1	4.7
-6	.0	.9	.4	.0	.1	.0	.0	11	.0	1.4
-7/-8	.1	.9	1.0	.0	.0	.0	.0	16	.0	2.0
-9/-10	.0	.4	.1	.0	.0	.0	.0	4	.0	.5
-11/-13	.0	.1	.0	.0	.0	.0	.0	1	.0	.1
TOTAL	5	222	382	27	2	1		781	13	768
PCT	.6	28.4	48.9	18.2	3.5	.3	.1	100.0	1.7	98.3

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
1-2	.2	4.0	.7	.0	.0	.0	4.9	.0	1.9	.1	.0	.0	.0	2.0
3-4	.0	.4	1.3	.2	.0	.0	2.0	.0	.6	.1	.1	.0	.0	.8
5-6	.0	.0	.7	.0	.0	.0	.7	.0	.0	.1	.0	.0	.0	.1
7	.0	.0	1.5	.0	.0	.0	1.5	.0	.0	.1	.0	.0	.0	.1
8-9	.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.2	4.7	4.3	.5	.0	.0	9.6	.0	2.3	.4	.1	.0	.0	3.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.3	.3	.0	.0	.0	.0	.6
1-2	.0	.2	.0	.0	.0	.0	.2	.1	.5	.2	.0	.0	.0	.8
3-4	.0	.2	.0	.0	.0	.0	.2	.0	.0	1.3	.3	.0	.0	1.6
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.8
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.4	.0	.0	.0	.0	.4	.3	.8	2.7	.3	.0	.0	4.2

PERIOD: (OVER-ALL) 1963-1977

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AREA 0029 COQUIMBO
28.55 72.2W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.8	2.9	.3	.0	.0	.0	4.0	.1	.3	.0	.0	.0	.0	.4	
1-2	1.6	9.6	2.9	.0	.0	.0	14.1	.0	1.3	.3	.0	.0	.0	1.7	
3-4	.0	5.7	10.3	.3	.0	.0	16.3	.0	.2	1.3	.0	.0	.0	1.5	
5-6	.2	1.8	10.6	2.2	.0	.0	14.8	.1	.7	2.5	.1	.0	.0	3.4	
7	.0	.0	3.4	2.1	.2	.0	5.7	.0	.3	.5	.1	.1	.0	1.0	
8-9	.0	.0	2.6	2.9	.0	.0	5.5	.0	.0	1.0	.1	.0	.0	1.1	
10-11	.0	.0	.3	.6	.3	.0	1.1	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.3	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	2.6	20.0	30.2	8.3	.5	.0	61.7	.1	2.9	5.6	.3	.1	.0	9.0	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	
1-2	.0	1.5	.6	.0	.0	.0	2.1	.1	1.6	.0	.0	.0	.0	1.7	
3-4	.0	.3	.0	.0	.0	.0	.3	.0	.4	.3	.0	.0	.0	.7	
5-6	.0	.0	.6	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	
8-9	.0	.0	.3	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	2.1	1.4	.0	.0	.0	3.5	.1	2.0	.6	.0	.0	.0	2.7	94.1

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	7.1	4.7	.3	.0	.0	.0	12.1	
1-2	2.7	20.5	4.4	.0	.0	.0	27.7	
3-4	.0	7.7	14.2	.8	.0	.0	22.7	
5-6	.3	2.5	14.5	2.2	.0	.0	19.5	
7	.0	.3	6.6	2.2	.3	.0	9.3	
8-9	.0	.0	3.8	3.3	.0	.0	7.1	
10-11	.0	.0	.3	.5	.3	.0	1.1	
12	.0	.0	.3	.0	.0	.0	.3	
13-16	.0	.0	.0	.3	.0	.0	.3	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	10.1	33.6	44.4	9.3	.5	.0	100.0	365

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.8	4.8	6.6	3.3	1.7	1.2	.7	.3	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	125	4
6-7	.2	.7	4.8	9.1	7.0	3.1	2.8	.8	1.5	.2	.5	.0	.0	.0	.0	.0	.0	.0	.0	183	7
8-9	.0	.2	2.2	4.0	4.8	3.3	2.0	1.2	2.6	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	126	8
10-11	.0	.2	2.5	1.5	1.0	2.8	2.2	.8	.8	.2	.0	.0	.2	.0	.0	.0	.0	.0	.0	73	8
12-13	.0	.0	.8	.2	.7	1.0	.5	1.3	1.7	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	38	10
>13	.0	.0	.0	.3	.3	.5	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	10	8
INDET	2.6	.5	2.5	.8	.7	.2	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	47	3
TOTAL	28	38	117	116	97	73	54	28	41	3	3	0	2	0	0	0	0	0	0	604	6
PCT	4.6	6.3	19.4	19.2	16.1	12.1	8.9	4.6	6.8	.8	.8	.0	.3	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977

JULY

TABLE 1

AREA 0029 COQUIMBO
28.55 72.3W

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG	NO DUST SIG WEA
N	.0	.0	1.7	.0	.0	.0	.0	1.7	8.2	1.7	6.1	.0	1.7	.0	80.5
NE	2.8	.0	2.8	.0	.0	.0	.0	5.6	.0	.0	9.8	.0	.0	.0	84.6
E	.0	.0	.0	.0	.0	.0	.0	.0	5.3	.0	.0	.0	.0	.0	94.7
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.7	2.2	.9	.0	.0	95.2
S	.2	.0	.0	.0	.0	.0	.0	.2	.2	.0	1.5	.1	.9	.4	96.8
SW	.3	.0	.3	.0	.0	.0	.0	.5	1.0	.0	2.8	.0	.8	.0	94.9
W	.0	.0	7.5	.0	.0	.0	.0	7.5	.0	.0	10.0	.0	.0	.0	82.5
NW	5.9	.0	.0	.0	.0	.0	.0	5.9	7.4	.0	5.9	.0	.0	.0	80.9
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	3.3	.0	.0	.0	.0	3.3	.0	.0	3.3	.0	6.7	.0	86.7
TOT PCT	.4	.0	.5	.0	.0	.0	.0	.9	1.1	.2	2.6	.1	1.0	.2	93.8
TOT OBS:	806														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG	NO DUST SIG WEA
0000	.5	.0	.0	.0	.0	.0	.0	.5	2.1	.0	2.6	.5	1.5	.0	92.8
0400	.0	.0	.0	.0	.0	.0	.0	.0	1.6	.0	2.1	.0	1.1	.5	94.7
1200	.5	.0	.9	.0	.0	.0	.0	1.4	.9	.5	2.7	.0	.9	.0	93.7
1800	.5	.0	1.0	.0	.0	.0	.0	1.5	.0	.5	3.4	.0	.5	.5	93.7
TOT PCT	.4	.0	.5	.0	.0	.0	.0	.9	1.1	.2	2.7	.1	1.0	.2	93.7
TOT OBS:	811														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	1.8	4.9	2.6	.7	.3	*		10.2	10.0	8.5	.0	10.0	9.5	10.1	9.7	12.2	10.0	
NE	.9	1.9	.6	.1	*	.0		3.6	7.5	2.6	6.7	3.2	3.1	4.3	9.7	4.5	2.6	
E	.6	.8	.3	.2	.0	.0		1.9	9.1	1.6	.0	2.2	1.8	2.2	4.8	2.1	1.1	
SE	1.3	3.9	4.0	2.2	.3	.0		11.7	13.8	10.0	13.3	11.3	13.1	13.3	7.3	12.0	10.6	
S	3.3	14.0	20.8	6.8	1.0	.1		47.0	13.9	50.0	45.0	50.4	46.9	49.4	58.1	41.1	47.2	
SW	1.3	4.9	3.2	.6	.1	.0		10.2	10.4	12.3	15.0	9.9	8.1	8.4	7.3	10.4	11.7	
W	.9	1.6	.7	.1	.0	.0		3.3	7.5	2.0	.0	2.6	4.6	3.0	.0	4.0	3.5	
NW	1.5	3.6	1.4	.2	.1	.0		6.7	8.2	6.3	.0	3.0	6.4	4.3	.0	9.6	7.7	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	5.4							5.4	.0	6.7	20.0	5.3	6.5	5.0	3.2	4.1	5.8	
TOT OBS	867	1431	1935	435	67	5	3960		11.5	653	15	641	479	658	31	1051	432	
TOT PCT	16.8	36.6	39.7	11.0	1.7	.1		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	06	12	18
N	4.7	3.8	1.3	.3	.2		10.2	10.0	8.3	9.8	10.1	11.5
NE	2.1	1.2	.2	.1	*		3.6	7.5	2.7	3.1	4.5	3.9
E	1.0	.5	.2	.0	.0		1.9	9.1	1.5	2.1	2.4	1.8
SE	3.1	4.3	3.1	1.2	*		11.7	13.8	10.0	12.1	13.0	11.6
S	9.0	21.0	14.1	2.6	.2		47.0	13.9	49.9	48.9	49.7	42.9
SW	3.5	4.6	1.8	.2	*		10.2	10.4	12.4	9.1	8.3	10.8
W	1.8	1.3	.2	.0	.0		3.3	7.5	2.0	3.5	2.9	3.9
NW	3.5	2.5	.7	.1	*		6.7	8.2	6.1	5.6	4.1	9.1
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	5.4						5.4	.0	7.0	5.8	4.9	4.5
TOT OBS	1349	1554	858	182	17	3960		11.5	608	1120	689	1483
TOT PCT	34.1	39.2	21.7	4.6	.4		100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977

JULY

AREA 0029 COQUIMBO
28.55 72.3W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47					
00003	7.0	10.3	32.9	35.6	12.9	1.0	.1	11.8	100.0		668
06009	5.8	11.7	34.8	34.8	10.9	1.8	.2	11.6	100.0		1120
12015	4.9	11.6	38.6	31.5	11.6	1.6	.1	11.4	100.0		689
18021	4.5	11.7	38.8	33.0	9.9	2.0	.1	11.3	100.0		1483
TOT	213	434	1431	1345	435	67	5	11.5			3960
PCT	5.4	11.5	36.6	33.7	11.0	1.7	.1		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	1.1	.5	2.1	3.0		6.0
NE	.6	.4	.8	2.7		6.4
E	.6	.2	.8	.9		5.5
SE	1.6	.9	3.0	2.1		5.0
S	18.6	8.4	12.7	19.9		4.7
SW	4.0	1.4	1.6	5.0		4.9
W	.2	.0	.1	.9		6.9
NW	.4	.0	.5	.9		5.7
VAR	.0	.0	.0	.0		.0
CALM	1.3	.8	.5	1.4		4.3
TOT OBS	178	79	138	233	628	5.0
TOT PCT	28.3	12.6	22.0	37.1	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000	130	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
149	299	599	999	1999	3499	4999	6499	7999			
.1	.0	.2	.8	2.3	.8	.0	.1	.0	.2	2.3	
.2	.0	.0	.7	2.0	.2	.2	.#	.0	.0	1.4	
.0	.0	.0	.1	.5	.2	.2	.3	.0	.0	1.1	
.2	.0	.2	.8	1.4	1.5	.5	.0	.0	.0	3.2	
.0	.1	1.3	7.3	13.3	4.6	1.6	.2	.0	.6	30.5	
.0	.#	.3	1.0	3.3	.5	.2	.0	.0	.2	6.4	
.0	.0	.0	.6	.2	.0	.0	.0	.0	.2	.2	
.#	.0	.1	.2	.4	.4	.2	.0	.0	.0	.7	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.2	.2	1.1	.0	.2	.2	.0	.0	2.4	
.3	.1	1.4	7.2	15.4	5.1	1.8	.5	.0	.7	30.3	
.5	.2	2.2	11.5	24.5	8.1	2.9	.8	.0	1.1	48.2	628
											100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	# OR >10	# OR >5	# OR >2	# OR >1	# OR >1/2	# OR >1/4	# OR >50YD	# OR >0
# OR >6500	.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1
# OR >5000	1.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9
# OR >3500	2.5	4.8	4.9	4.9	4.9	4.9	4.9	4.9
# OR >2000	9.7	12.8	13.0	13.0	13.0	13.0	13.0	13.0
# OR >1000	29.5	36.6	37.1	37.2	37.2	37.2	37.2	37.2
# OR >600	36.8	48.0	48.7	48.8	48.8	48.8	48.8	48.8
# OR >300	38.0	49.9	50.7	51.0	51.0	51.0	51.0	51.0
# OR >150	38.2	50.1	50.9	51.2	51.2	51.2	51.2	51.2
# OR >0	38.7	50.6	51.3	51.7	51.7	51.7	51.7	51.7
TOTAL	244	319	324	326	326	326	326	326

TOTAL NUMBER OF OBS: 631

PCT FREQ NH <5/8: 48.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
14.3	10.2	8.5	7.3	6.0	5.4	7.3	6.5	34.6	.0	683

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977

JULY

AREA 0029 COQUIMBO
28.55 72.3W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.1	.1	.0	.0	.1	.1	.1	.1	.0	.0	.0	.5
	TOT %	.1	.1	.0	.0	.1	.1	.1	.1	.0	.0	.0	.5
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.1
	TOT %	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.1
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.2	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.2
	TOT %	.2	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.2
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.2	.0	.0	.1	.8	.1	.0	.1	.0	.0	.0	1.1
	TOT %	.2	.0	.0	.1	.8	.1	.0	.1	.0	.0	.0	1.1
5<10	PCP	.1	.1	.0	.0	.0	.1	.1	.1	.0	.1	.6	.6
	NO PCP	.7	.8	.3	1.4	8.7	2.2	.2	.3	.0	.4	15.1	15.1
	TOT %	.9	1.0	.3	1.4	8.7	2.3	.3	.4	.0	.5	15.8	15.8
10+	PCP	.0	.1	.0	.0	.1	.1	.0	.0	.0	.0	.2	.2
	NO PCP	5.8	3.3	2.0	5.6	50.0	9.8	.8	1.5	.0	3.2	82.0	82.0
	TOT %	5.8	3.4	2.0	5.6	50.1	9.8	.8	1.5	.0	3.2	82.3	82.3
TOT OBS		806											
TOT PCT		7.2	4.4	2.3	7.1	59.6	12.3	1.2	2.1	.0	3.7	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3	.4	.4
	4-10	.2	.1	.0	.0	.0	.0	.0	.1	.0	.0	.3	.3
	11-21	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.1	.1
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.2	.1	.0	.0	.1	.1	.1	.1	.0	.3	.8	.8
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.1	.1
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.1	.1
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1
	4-10	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1
	11-21	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.3
2<5	0-3	.1	.0	.0	.0	.1	.1	.0	.1	.0	.2	.6	.6
	4-10	.1	.0	.0	.1	.3	.1	.0	.0	.0	.0	.7	.7
	11-21	.1	.0	.0	.1	.3	.1	.0	.0	.0	.0	.6	.6
	22+	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	TOT %	.3	.0	.0	.1	.8	.3	.0	.1	.0	.2	1.9	1.9
5<10	0-3	.1	.1	.1	.2	.6	.2	.2	.0	.0	1.0	2.4	2.4
	4-10	.9	.6	.2	.7	4.1	1.1	.0	.3	.0	.0	7.9	7.9
	11-21	.3	.1	.1	.3	3.3	.7	.2	.0	.0	.0	5.0	5.0
	22+	.1	.0	.0	.1	.8	.3	.0	.0	.0	.0	1.2	1.2
	TOT %	1.4	.8	.4	1.3	8.8	2.2	.3	.3	.0	1.0	16.5	16.5
10+	0-3	.5	.5	.7	.3	1.7	.5	.1	.2	.0	3.5	7.9	7.9
	4-10	3.5	2.1	.9	2.3	15.5	5.3	.7	1.0	.0	.0	31.1	31.1
	11-21	1.5	.7	.0	2.2	24.3	3.7	.1	.4	.0	.0	32.9	32.9
	22+	.2	.0	.0	.1	7.5	.9	.0	.0	.0	.0	8.6	8.6
	TOT %	5.7	3.3	1.5	4.7	49.0	10.4	.8	1.5	.0	3.5	80.5	80.5
TOT OBS		1065											
TOT PCT		7.6	4.1	1.9	6.2	58.8	13.1	1.2	2.0	.0	5.1	100.0	

JULY

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977AREA 0029 COQUIMBO
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	.6	.0	1.9	10.9	19.9	5.1	1.9	.0	.0	.0	40.4	59.6	156
06009	.7	.0	.7	8.8	27.2	4.4	2.2	1.5	.0	1.5	47.1	52.9	136
12015	.0	.6	3.4	12.4	29.2	9.6	3.4	1.7	.0	1.7	61.8	38.2	178
18021	.6	.0	2.3	12.6	19.5	11.5	4.0	.0	.0	1.1	51.7	48.3	174
TOT	3	1	14	73	154	51	19	5	0	7	327	317	644
PCT	.5	.2	2.2	11.3	23.9	7.9	3.0	.8	.0	1.1	50.8	49.2	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.8	.0	.0	1.2	16.9	81.1	243
06009	.7	.0	.4	2.1	14.8	82.0	284
12015	.8	.4	.0	3.0	16.7	79.2	264
18021	.7	.0	.7	1.8	17.6	79.2	279
TOT	8	1	3	22	176	860	1070
PCT	.7	.1	.3	2.1	16.4	80.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOUR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.7	2.7	14.8	27.5	57.7	149
06009	.7	1.5	11.9	37.0	51.1	135
12015	.0	4.5	18.6	44.1	37.3	177
18021	.6	2.9	16.5	36.5	47.1	170
TOT	3	19	99	231	301	631
PCT	.5	3.0	15.7	36.6	47.7	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
70/74	.0	.0	.0	.1	.1	.0	.0	.0	2	.3
65/69	.0	.0	.0	.0	1.0	.4	.3	.0	12	1.7
60/64	.0	.0	.0	.3	2.5	5.7	2.3	.6	82	11.3
55/59	.0	.0	.0	.4	6.3	23.4	28.3	7.9	481	66.3
50/54	.0	.0	.0	.0	1.9	3.6	10.9	4.0	148	20.4
TOTAL	0	0	0	6	86	240	303	90	729	100.0
PCT	.0	.0	.0	.8	11.9	33.1	41.8	12.4		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.2	*	.0	.0	.0	.0
.0	.0	.0	.1	1.3	.1	.0	.1	.0	.0
.6	.3	.1	.9	7.6	1.1	.1	.1	.0	.6
5.1	3.6	.9	4.1	38.0	9.1	.6	1.3	.0	3.6
1.4	1.0	.2	1.3	12.3	2.4	.3	.4	.0	1.0
7.1	4.8	1.3	6.6	59.4	12.8	1.0	2.0	.0	5.1

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	64	62	61	56	53	51	50	56.5	656
06009	64	61	60	56	52	50	47	55.8	1111
12015	70	65	61	56	52	51	48	56.3	676
18021	73	67	64	59	54	52	50	58.8	1416
TOT	73	66	62	57	53	51	47	57.1	3869

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	8.7	35.3	44.0	12.0	81	184
06009	.0	.0	12.4	29.4	42.9	15.3	82	170
12015	.0	.5	7.8	33.3	43.8	14.6	81	192
18021	.0	2.7	16.5	34.2	35.9	8.7	78	184
TOT	0	6	86	242	304	92	80	730

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977

JULY

TABLE 17

AREA 0029 COQUIMBO
28.55 72.3W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	69 72	TOT	W FOG	WD FOG
14/16	.0	.0	.0	.0	.1	.0	.1	2	.0	.3
11/13	.0	.0	.0	.0	.1	.0	.0	1	.0	.1
9/10	.0	.0	.0	.1	.1	.1	.0	3	.0	.4
7/8	.0	.0	.0	.4	.1	.6	.1	9	.0	1.2
6	.0	.0	.0	.1	.0	.4	.0	4	.0	.6
5	.0	.0	.3	.6	.8	.1	.0	13	.0	1.8
4	.0	.0	.4	1.1	1.0	.4	.0	21	.0	2.9
3	.0	.0	.7	1.9	.7	.3	.0	26	.0	3.6
2	.0	.0	1.1	2.3	1.4	.0	.0	35	.1	4.7
1	.0	.0	2.2	5.2	.4	.0	.0	57	.1	7.7
0	.0	.4	7.7	8.1	.6	.0	.0	122	.7	16.1
-1	.0	.4	9.0	6.6	.8	.0	.0	122	.7	16.1
-2	.0	1.2	6.9	4.8	.0	.0	.0	94	.1	12.8
-3	.0	.6	8.3	3.7	.0	.0	.0	91	.7	11.8
-4	.0	1.4	4.3	1.8	.1	.0	.0	55	.1	7.4
-5	.1	.6	3.2	1.8	.0	.0	.0	41	.1	5.5
-6	.0	.3	1.9	.1	.0	.0	.0	17	.1	2.2
-7/-8	.0	.3	.8	.0	.0	.0	.0	8	.0	1.1
-9/-10	.0	.3	.1	.0	.0	.0	.0	3	.0	.4
-11/-13	.0	.0	.1	.0	.0	.0	.0	1	.0	.1
-14/-16	.0	.0	.1	.0	.0	.0	.0	1	.0	.1
TOTAL	1		342		46		2	726	2.1	705
PCT	.1	5.4	47.1	38.8	6.3	1.9	.2	100.0	2.9	97.1

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.2	1.0	.0	.0	.0	.0	1.3	.5	1.4	.0	.0	.0	.0	1.9
1-2	.5	1.6	.0	.0	.0	.0	2.1	.0	1.2	.6	.0	.0	.0	1.8
3-4	.3	.6	.9	.0	.0	.0	1.7	.0	.1	.4	.0	.0	.0	.5
5-6	.0	.6	.6	.0	.0	.0	1.3	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.3	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.0	3.8	1.8	.0	.0	.0	6.6	.5	2.7	1.0	.0	.0	.0	4.2

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.5	.0	.0	.0	.0	.0	.5	.4	.6	.0	.0	.0	.0	1.0
1-2	.0	.2	.0	.0	.0	.0	.2	.0	1.2	.1	.0	.0	.0	1.3
3-4	.0	.2	.0	.0	.0	.0	.2	.0	.8	.6	.0	.0	.0	1.4
5-6	.0	.0	.0	.0	.0	.0	.0	.1	.1	.9	.1	.0	.0	1.2
7	.0	.0	.0	.0	.0	.0	.0	.0	.1	.7	.0	.0	.0	.8
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	.5	.0	.0	.0	.0	.9	.5	2.8	2.5	.1	.0	.0	5.8

PERIOD: (OVER-ALL) 1963-1977

JULY

AREA 0029 COQUIMBO
28.35 72.3W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							PCT	SW							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	1.5	2.5	2.2	.0	.0	.0		4.2	.4	1.2	.1	.0	.0	.0		1.8
1-2	.3	6.9	5.8	.0	.0	.0		13.0	.1	3.2	1.1	.0	.0	.0		4.5
3-4	.2	5.0	10.0	.6	.0	.0		15.8	.1	1.6	1.0	.1	.0	.0		2.8
5-6	.2	2.0	9.7	1.7	.0	.0		12.6	.0	.2	.8	.1	.0	.0		1.1
7	.0	.7	6.4	2.8	.0	.0		9.9	.0	.2	1.1	.1	.0	.0		1.3
8-9	.0	.0	1.1	1.5	.0	.0		2.6	.0	.0	.2	.1	.0	.0		.2
10-11	.0	.0	.2	1.4	.0	.0		1.7	.0	.0	.0	.2	.0	.0		.2
12	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
13-16	.0	.0	.3	.7	.0	.0		1.0	.0	.0	.0	.2	.0	.0		.2
17-19	.0	.0	.0	.2	.6	.0		.8	.0	.0	.0	.1	.1	.0		.2
20-22	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
23-25	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
26-32	.0	.0	.0	.3	.0	.0		.3	.0	.0	.0	.0	.0	.0		.0
33-40	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
41-48	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
49-60	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
61-70	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
71-86	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
87+	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
TOT PCT	2.3	17.0	33.8	9.3	.6	.0		62.9	.6	6.6	4.3	.8	.1	.0		12.3

HGT	W							PCT	NW							PCT	TOTAL PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+			
<1	.3	.0	.0	.0	.0	.0		.3	.0	.1	.0	.0	.0	.0		.1	
1-2	.2	.0	.3	.0	.0	.0		.6	.2	1.4	.0	.0	.0	.0		1.6	
3-4	.0	.3	.0	.0	.0	.0		.3	.0	.3	.3	.0	.0	.0		.6	
5-6	.0	.2	.0	.0	.0	.0		.2	.0	.0	.0	.0	.0	.0		.0	
7	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
8-9	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
10-11	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
12	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
13-16	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
17-19	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
20-22	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
23-25	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
26-32	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
33-40	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
41-48	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
49-60	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
61-70	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
71-86	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
87+	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
TOT PCT	.6	.6	.3	.0	.0	.0		1.4	.2	1.8	.3	.0	.0	.0		2.3	96.5

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	8.2	6.9	.3	.0	.0	.0	15.4	
1-2	1.2	15.7	7.8	.0	.0	.0	24.8	
3-4	.6	8.8	13.2	.6	.0	.0	23.2	
5-6	.3	3.1	11.9	1.9	.0	.0	17.2	
7	.0	.9	8.2	2.8	.0	.0	11.9	
8-9	.0	.0	1.6	1.6	.0	.0	3.1	
10-11	.0	.0	.3	1.6	.0	.0	1.9	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.3	.9	.0	.0	1.3	
17-19	.0	.0	.0	.3	.6	.0	.9	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.3	.0	.0	.3	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	10.3	35.4	43.6	10.0	.6	.0	100.0	319

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.6	7.2	10.3	6.7	2.1	1.0	.3	.0	.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	180	4
6-7	.0	1.5	7.2	10.3	6.3	2.6	2.2	.5	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	186	6
8-9	.0	.3	1.5	2.1	5.5	3.6	2.2	.3	1.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	102	8
10-11	.0	.3	.3	1.4	2.1	1.5	1.9	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	39	7
12-13	.0	.0	.2	.2	.9	1.2	1.5	.2	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	27	9
>13	.0	.0	.0	.0	.7	1.0	.3	.7	.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	19	8
INDET	1.0	.7	.3	.7	1.0	.9	.5	.0	.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	32	6
TOTAL	21	59	116	129	110	65	48	8	22	5	1	0	1	0	0	0	0	0	0	585	6
PCT	3.6	10.1	19.8	22.1	18.8	11.1	8.2	1.4	3.8	.9	.2	.0	.2	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1871-1977

AUGUST

TABLE 1

AREA 0029 COQUIMBO
28.55 72.3W

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WND DIR	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	ND SIG WEA
N	.0	3.3	1.7	.0	.0	.0	.0	5.0	3.3	.0	5.8	.0	1.3	.0	84.6
NE	.0	.0	.0	.0	.0	.0	.0	.0	4.4	.0	.0	.0	.0	.0	95.6
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.3	.0	95.7
S	.0	.2	.0	.0	.0	.0	.0	.2	.7	.2	.9	.0	1.7	.0	96.4
SW	.8	.2	.8	.0	.0	.0	.0	1.9	.0	.0	2.5	.0	.4	.0	95.2
W	4.5	6.1	4.5	.0	.0	.0	.0	10.6	6.1	.0	.0	.0	.0	.0	83.3
NW	.9	.0	.9	.0	.0	.0	.0	.9	3.7	.0	1.9	.0	8.3	.0	85.2
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	2.8	.0	.0	.0	.0	.0	2.8	2.8	.0	.0	.0	2.8	.0	91.7
TOT PCT	.3	.7	.4	.0	.0	.0	.0	1.2	1.2	.1	1.4	.0	1.7	.0	94.4
TOT OBS:	762														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA								
	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG BLWG	DUST SNOW	ND SIG WEA
00603	.5	.5	.0	.0	.0	.0	.0	1.1	.5	.0	.5	.0	1.6	.0		96.2
06609	.0	1.0	1.0	.0	.0	.0	.0	2.1	1.0	.0	1.0	.0	1.6	.0		93.8
12615	.0	1.0	.0	.0	.0	.0	.0	1.0	2.0	.0	1.5	.0	1.0	.0		94.6
18621	.5	.0	.5	.0	.0	.0	.0	.5	1.0	.0	2.6	.0	2.6	.0		93.3
TOT PCT	.3	.6	.4	.0	.0	.0	.0	1.2	1.2	.1	1.4	.0	1.7	.0		94.4
TOT OBS:	773															

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21	
N	1.6	4.3	1.8	.5	*	.0		8.1	8.9		6.5	21.4	5.7	7.7	8.1	2.1	11.0	7.6
NE	.7	1.3	.3	*	.0	.0		2.4	6.6		1.7	.0	1.6	2.1	3.5	8.3	3.0	1.3
E	.5	1.0	.3	.1	.0	.0		1.8	6.9		1.9	.0	1.3	2.1	2.4	.0	1.7	1.2
SE	.7	3.1	4.8	1.8	.2	.0		10.7	14.3		8.8	1.8	10.0	14.4	11.9	4.2	9.5	11.8
S	2.0	14.5	23.3	8.2	1.5	.1		49.4	14.9		53.1	53.6	52.8	49.2	51.4	67.7	43.6	48.6
SW	1.5	6.3	4.6	1.1	.2	.0		13.7	11.1		15.1	8.9	13.8	11.9	12.3	15.6	13.7	16.4
W	.9	1.9	.5	*	.0	.0		3.4	7.1		2.9	.0	3.5	2.1	2.0	.0	4.6	5.2
NW	1.6	3.1	1.1	.2	*	.0		6.0	7.3		4.9	14.3	4.9	5.8	4.5	2.1	8.7	5.2
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	4.5							4.5	.0		5.0	.0	6.4	4.8	3.9	.0	4.2	2.5
TOT OBS	492	1238	1282	419	61	2	3494		12.1		558	14	591	437	569	24	938	363
TOT PCT	14.1	35.4	36.7	12.0	1.7	.1		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
		7-16	17-27	28-40	00 03					06 09	12 15	18 21		
N	3.9	2.2	.7	.2	*		8.1	8.9	6.9	6.5	7.9	10.0		
NE	1.5	.8	.1	*	.0		2.4	6.6	1.7	1.8	3.7	2.6		
E	1.2	.4	.1	*	.0		1.8	6.9	1.9	1.6	2.3	1.6		
SE	1.8	4.8	3.3	.7	.1		10.7	14.3	8.7	11.9	11.6	10.1		
S	7.8	20.9	16.8	3.5	.4		49.4	14.9	53.1	51.3	52.1	45.0		
SW	4.5	6.1	2.8	.4	*		13.7	11.1	14.9	13.0	12.4	14.4		
W	2.1	1.1	.2	*	*		3.4	7.1	2.8	2.9	1.9	4.7		
NW	3.5	2.1	.4	*	*		6.0	7.3	5.2	5.3	4.4	7.8		
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		
CALM	4.5						4.5	.0	4.9	5.7	3.7	3.7		
TOT OBS	1074	1380	850	172	18	3494		12.1	572	1028	593	1301		
TOT PCT	30.7	39.5	24.3	4.9	.5		100.0		100.0	100.0	100.0	100.0		

AUGUST

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1871-1977AREA 0029 COQUIMBO
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)						48+	MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47					
0000Z	4.9	8.6	35.3	37.1	11.5	2.6	.0	12.5	100.0		572
0600Z	5.7	9.0	35.8	36.4	11.1	1.8	.2	12.0	100.0		1028
1200Z	3.7	9.1	35.2	37.8	12.5	1.7	.5	12.4	100.0		593
1800Z	3.7	10.7	35.3	36.3	12.7	1.4	.0	11.9	100.0		1301
TOT	157	335	1238	1282	419	61	2	12.1			3494
PCT	4.5	9.6	35.4	36.7	12.0	1.7	.1		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 10 OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	1.3	1.2	.9	3.3		5.5
NE	.7	.0	.2	1.6		5.7
E	.2	.0	.1	.5		6.1
SE	1.1	.3	.6	1.4		4.9
S	21.2	8.4	13.8	15.7		4.3
SW	5.3	1.3	3.4	5.1		4.7
W	.2	.5	.7	.9		5.9
NW	.9	.4	1.2	1.3		5.3
VAR	.0	.0	.0	.0		.0
CALM	.5	.9	1.9	2.8		6.1
TOT OBS	180	74	131	187	572	4.7
TOT PCT	31.5	12.9	22.9	32.7	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	400 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.0	.0	.5	2.2	.5	.1	.0	.0	.1	3.1	
NE	.0	.0	.2	.4	.9	.0	.0	.0	.0	.0	1.0	
E	.0	.0	.0	.1	.4	.0	.0	.0	.0	.1	.2	
SE	.0	.0	.1	.4	1.0	.2	.0	.0	.0	.0	1.7	
S	.2	.1	.9	6.6	15.9	1.9	1.0	.3	.0	.2	32.0	
SW	.0	.0	.0	1.0	4.2	.9	.4	.0	.0	.0	8.4	
W	.1	.0	.0	.6	.4	.2	.0	.0	.0	.1	.9	
NW	.0	.0	.0	.2	1.4	.4	.2	.0	.0	.0	1.6	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.7	1.6	.2	.3	.0	.0	.0	3.3	
TOT OBS	2	1	7	61	180	24	12	2	1	3	299	572
TOT PCT	.3	.2	1.2	10.7	28.0	4.2	2.1	.3	.2	.5	52.3	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.5	.7	.7	.7	.7	.7	.7	.7
>4000	.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
>3500	2.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1
>2000	5.7	7.3	7.3	7.3	7.3	7.3	7.3	7.3
>1000	28.3	35.4	35.6	35.6	35.6	35.6	35.6	35.6
>500	37.1	45.9	46.1	46.1	46.1	46.1	46.1	46.1
>300	37.7	47.2	47.3	47.3	47.3	47.3	47.3	47.3
>150	37.7	47.3	47.5	47.5	47.5	47.5	47.5	47.5
>0	37.7	47.7	47.8	47.8	47.8	47.8	47.8	47.8
TOTAL	216	276	277	277	277	277	277	277

TOTAL NUMBER OF OBS: 579

PCT FREQ NH <5/8: 52.2

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
17.8	12.4	7.3	7.0	6.8	3.7	7.5	10.5	26.7	.3	629

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1871-1977

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28.55 72.3W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.1	.0	.0	.0	.3	.1	.0	.0	.0	.0	.5	
	TOT %	.1	.0	.0	.0	.3	.1	.0	.0	.0	.0	.5	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
2<5	PCP	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	
	NO PCP	.1	.0	.0	.0	.1	.1	.0	.0	.0	.3	.7	
	TOT %	.1	.0	.0	.0	.1	.3	.0	.0	.0	.3	.8	
5<10	PCP	.4	.0	.0	.0	.0	.0	.1	*	.0	.0	.5	
	NO PCP	1.8	.6	.1	*	8.1	2.3	.3	.7	.0	.8	14.6	
	TOT %	2.2	.6	.1	*	8.1	2.3	.4	.7	.0	.8	15.2	
10+	PCP	.0	.0	.0	.0	.1	.2	.1	.0	.0	.1	.5	
	NO PCP	5.4	2.4	.5	3.0	50.6	13.0	1.7	2.9	.0	3.6	83.0	
	TOT %	5.4	2.4	.5	3.0	50.7	13.1	1.8	2.9	.0	3.7	83.5	
TOT OBS													759
TOT PCT		7.9	3.0	.6	3.0	59.3	13.7	2.2	3.6	.0	4.7	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	4-10	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	
	11-21	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.2	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.0	.0	.0	.2	*	.0	.0	.0	.0	.4	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	4-10	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.2	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.3	
2<5	0-3	*	.0	.0	.1	.0	.0	.0	*	.0	.4	.6	
	4-10	*	.0	.1	*	*	.0	.0	*	.0	.3	.3	
	11-21	.1	.0	.0	.0	.3	.1	.0	.0	.0	.5	.5	
	22+	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1	.1	
	TOT %	.2	.0	.1	.1	.3	.2	.0	.1	.0	.4	1.5	
5<10	0-3	.2	.1	.1	.0	.3	.3	.2	*	.0	.9	2.0	
	4-10	1.4	.1	.0	*	2.3	1.3	.1	.3	.0	5.6	5.6	
	11-21	.5	.2	.1	*	4.0	.8	.0	.2	.0	5.8	5.8	
	22+	.0	.0	.0	.0	1.6	.2	.0	.0	.0	1.9	1.9	
	TOT %	2.1	.4	.2	.1	8.2	2.6	.3	.6	.0	.9	15.3	
10+	0-3	.4	*	.1	.3	1.4	1.1	.6	.4	.0	3.5	7.9	
	4-10	3.3	1.4	.2	1.7	13.9	6.5	1.4	2.1	.0	30.4	30.4	
	11-21	1.2	.4	.2	.9	25.5	4.6	.2	.1	.0	39.2	39.2	
	22+	.3	*	.0	.3	9.1	1.4	.0	.0	.0	11.1	11.1	
	TOT %	5.2	1.9	.5	3.1	49.9	13.6	2.2	2.7	.0	3.5	82.6	
TOT OBS													1027
TOT PCT		7.6	2.3	.8	3.5	58.6	16.6	2.5	3.3	.0	4.9	100.0	

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1871-1977

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AREA 0029 CQQUIMBO
28.5S 72.3W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	.0	.0	.7	8.8	22.6	1.5	1.5	.0	.0	1.5	36.5	63.5	137
06009	.0	.0	1.4	8.3	29.7	2.6	2.1	.7	.0	.0	44.8	55.2	145
12015	.6	.6	1.8	11.6	35.4	5.5	2.4	.0	.6	.0	58.5	41.5	164
18021	.6	.0	.6	11.7	20.8	5.8	1.9	.0	.0	.6	42.9	57.1	154
TOT	2	1	7	61	164	24	12	2	1	3	277	323	600
PCT	.3	.2	1.2	10.2	27.3	4.0	2.0	.3	.2	.5	46.2	53.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.4	1.3	14.0	84.3	229
06009	.0	.7	.0	1.8	15.2	82.2	276
12015	.0	.4	.4	1.2	13.8	84.3	254
18021	.0	.4	.4	1.4	18.3	79.6	279
TOT	0	4	3	15	160	856	1038
PCT	.0	.4	.3	1.4	15.4	82.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.0	.8	10.6	28.0	61.4	132
06009	.0	1.4	10.8	36.0	53.2	139
12015	.6	3.1	14.9	44.7	40.4	161
18021	.7	1.4	13.6	31.3	55.1	147
TOT	2	10	73	205	301	579
PCT	.3	1.7	12.6	35.4	52.0	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
70/74	.0	.0	.0	.1	.3	.0	.0	.0	3	.4
65/69	.0	.0	.0	.0	.1	.4	.4	.3	9	1.3
60/64	.0	.0	.0	.4	2.4	5.2	2.4	.6	74	11.0
55/59	.0	.0	.0	.6	4.8	19.6	31.2	8.2	433	64.3
50/54	.0	.0	.0	.0	.9	2.8	11.6	7.4	153	22.7
45/49	.0	.0	.0	.0	.0	.0	.1	.0	1	.1
TOTAL	0	0	0	8	57	189	308	111	673	100.0
PCT	.0	.0	.0	1.2	8.5	28.1	45.8	16.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
70/74	.0	.0	.0	.0	.3	.0	.0	.1	.0	.0
65/69	.1	.0	.0	.0	.8	.3	.0	.1	.0	.0
60/64	1.1	.3	.0	.4	6.0	1.6	.2	.7	.0	.7
55/59	5.6	1.4	.4	2.3	39.5	9.1	1.2	1.6	.0	3.3
50/54	2.1	.9	.1	.5	14.4	3.0	.5	.3	.0	.9
45/49	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
TOTAL	8.8	2.7	.5	3.2	61.1	14.0	1.9	2.9	.0	4.9

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	66	63	60	56	52	50	49	56.0	371
06009	64	61	58	55	52	50	49	54.9	1037
12015	65	62	59	55	52	50	47	55.5	595
18021	72	67	64	58	54	51	50	58.3	1224
TOT	72	65	62	56	52	50	47	56.4	3427

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	6.0	32.3	47.3	14.4	82	167
06009	.0	.6	4.0	26.6	50.9	17.9	83	173
12015	.0	1.7	7.5	22.0	45.7	23.1	84	173
18021	.0	2.4	16.5	31.2	38.2	11.8	79	170
TOT	0	8	58	191	311	115	82	683

AUGUST

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1871-1977

TABLE 17

AREA 0029 COQUIMBO
28.55 72.3WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	65 68	69 72	TOT	W FOG	WO FOG
11/13	.0	.0	.1	.1	.7	.1	8	.0	1.1
9/10	.0	.0	.3	.6	.0	.3	8	.0	1.1
7/8	.0	.7	.6	1.3	.4	.0	21	.1	2.8
6	.0	.1	.4	.6	.0	.0	8	.0	1.1
5	.0	.3	1.0	.6	.0	.0	13	.0	1.8
4	.0	.4	1.7	1.1	.0	.0	23	.1	3.1
3	.0	.7	2.4	.7	.0	.0	27	.1	3.6
2	.1	2.4	4.9	.8	.0	.0	59	.0	8.9
1	.1	4.5	4.9	1.1	.0	.0	76	.4	10.2
0	.3	7.8	9.0	1.3	.0	.0	131	.3	18.0
-1	.6	8.8	4.2	.6	.0	.0	101	.1	14.0
-2	.4	9.0	3.5	.3	.0	.0	94	.0	13.1
-3	.8	4.9	2.9	.1	.0	.0	63	.0	8.8
-4	1.1	2.4	1.5	.1	.0	.0	37	.1	5.0
-5	.6	2.0	.7	.0	.0	.0	23	.1	3.1
-6	.4	.4	.0	.0	.0	.0	6	.0	.8
-7/-8	.3	1.1	.1	.0	.0	.0	11	.0	1.5
-9/-10	.4	.4	.0	.0	.0	.0	6	.0	.8
TOTAL	37	328	273	66	3	3	715	1.5	704
PCT	5.2	45.9	38.2	9.2	1.1	.4	100.0	1.5	98.5

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.3	.0	.0	.0	.0	.3	.0	.3	.0	.0	.0	.0	.3
1-2	.0	3.1	.0	.0	.0	.0	3.1	.0	1.4	.0	.0	.0	.0	1.4
3-4	.0	1.0	2.1	.3	.0	.0	3.3	.0	.3	.3	.1	.0	.0	.8
5-6	.0	.0	.3	.0	.0	.0	.3	.0	.0	1.0	.0	.0	.0	1.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	4.4	2.4	.6	.3	.0	7.8	.0	2.1	1.7	.1	.0	.0	3.9

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.4	.1	.0	.0	.0	.5
1-2	.0	.0	.0	.0	.0	.0	.0	.3	1.6	.1	.0	.0	.0	2.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.4
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.3
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0	.0	.4
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.3	2.1	.7	.3	.0	.0	3.7

PERIOD: (OVER-ALL) 1963-1977

AUGUST

AREA 0029 COQUIMBO
28.5S 72.3W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	2.3	.3	.0	.0	.0	2.5	1.0	1.9	.0	.0	.0	.0	3.0
1-2	.0	7.0	3.7	.0	.0	.0	10.7	.7	3.0	1.0	.0	.0	.0	4.7
3-4	.0	1.7	12.9	2.9	.0	.0	17.4	.0	1.8	1.0	.2	.0	.0	3.0
5-6	.0	.6	8.7	1.7	.0	.0	11.1	.0	.4	.6	.0	.0	.0	1.0
7	.0	.0	4.8	4.3	.0	.0	9.1	.0	.0	1.5	.5	.0	.0	2.0
8-9	.0	.3	3.1	2.7	.3	.0	6.5	.0	.0	.3	.4	.0	.0	.8
10-11	.0	.0	1.0	1.0	.0	.0	2.1	.0	.0	.7	.0	.0	.0	.7
12	.0	.0	.3	.0	.3	.0	.7	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.3	.0	.3	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	11.8	34.9	13.0	1.0	.0	60.8	1.7	7.1	5.2	1.1	.0	.0	15.2

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.3	.5	.0	.0	.0	.0	.9	.0	.1	.0	.0	.0	.0	.1	
1-2	.0	.3	.0	.0	.0	.0	.3	.0	.3	.0	.0	.0	.0	.7	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.4	
5-6	.0	.3	.6	.0	.0	.0	.9	.0	.3	.1	.0	.0	.0	.4	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.3	1.1	.6	.0	.0	.0	2.1	.3	1.2	.1	.0	.0	.0	1.7	95.1

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT
<1	6.9	5.0	.3	.0	.0	.0	13.1	285
1-2	1.4	10.6	4.8	.0	.0	.0	22.8	
3-4	.0	5.2	16.3	3.8	.0	.0	25.3	
5-6	.0	1.7	11.4	1.7	.0	.0	14.9	
7	.0	.0	6.6	4.8	.0	.0	11.4	
8-9	.0	.3	3.8	3.1	.3	.0	7.6	
10-11	.0	.0	1.7	1.0	.0	.0	2.8	
12	.0	.0	.3	.0	.3	.0	.7	
13-16	.0	.0	.0	.3	.0	.0	.3	
17-19	.0	.0	.0	.0	.7	.0	.7	
20-22	.0	.0	.0	.3	.0	.0	.3	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	8.3	29.8	45.3	15.2	1.4	.0	100.0	289

PERIOD: (OVER-ALL) 1951-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.0	4.7	7.7	4.3	1.8	1.2	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	108	4
6-7	.0	1.4	6.5	10.1	6.7	2.4	1.6	.6	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	146	6
8-9	.0	.4	1.4	5.1	4.3	4.7	3.2	1.8	1.6	.0	.2	.0	.2	.0	.0	.0	.0	.0	.0	108	8
10-11	.0	.4	.8	1.0	1.6	3.2	1.6	.6	.6	.8	.4	.0	.0	.0	.0	.0	.0	.0	.0	61	9
12-13	.0	.0	.8	1.2	2.2	2.2	1.2	.6	.6	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	24	8
13	.0	.0	.0	.0	.2	.8	.4	.2	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	11
INDET	1.6	.4	1.4	1.0	1.0	.8	.4	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	34	4
TOTAL	13	36	92	112	78	66	48	20	20	5	3	0	1	0	0	0	0	0	0	494	6
PCT	2.6	7.3	18.6	22.7	15.8	13.4	9.7	4.0	4.0	1.0	.6	.0	.2	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1868-1977

SEPTEMBER

AREA 0029 COQUIMBO
28.5S 72.3W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WNO DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEAT
N	.0	.0	2.8	.0	.0	.0	.0	2.8	2.8	.0	2.1	.0	6.9	.0	85.5
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	12.5	.0	87.5
E	.0	16.7	.0	.0	.0	.0	.0	16.7	16.7	.0	.0	.0	.0	.0	66.7
SE	.0	.0	2.5	.0	.0	.0	.0	2.5	.0	.0	1.3	.0	.6	.0	95.5
S	.0	.0	1.5	.0	.0	.0	.0	1.5	.2	.2	1.2	.2	.8	.0	95.8
SW	.0	.0	4.0	.0	.0	.0	.0	4.0	1.7	.0	2.3	.0	1.1	.0	90.9
W	.0	.0	.0	.0	.0	.0	.0	.0	4.9	.0	2.4	.0	.0	.0	92.7
NW	5.6	.0	5.6	.0	.0	.0	.0	11.3	.0	.0	4.2	.0	.0	.0	84.5
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	5.9	.0	.0	.0	.0	5.9	.0	.0	.0	.0	.0	.0	94.1
TOT PCT	.1	.1	2.1	.0	.0	.0	.0	2.4	.8	.1	1.5	.1	1.1	.0	94.0
TOT OBS:	800														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
0000Z	.0	.5	1.0	.0	.0	.0	.0	1.4	.0	.5	1.4	.0	.0	.0	96.7
0600Z	.0	.0	.5	.0	.0	.0	.0	.5	1.1	.0	1.1	.0	.3	.0	96.8
1200Z	.5	.0	4.6	.0	.0	.0	.0	5.0	.9	.0	2.3	.0	1.4	.0	90.4
1800Z	.0	.0	1.9	.0	.0	.0	.0	1.9	1.0	.0	1.0	.5	2.4	.0	93.2
TOT PCT	.1	.1	2.1	.0	.0	.0	.0	2.3	.7	.1	1.5	.1	1.1	.0	94.2
TOT OBS:	823														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	1.5	3.5	1.0	.2	.0	.0		6.1	7.3	4.1	.0	6.0	6.6	6.7	4.6	7.6	5.1	
NE	.3	.8	.1	.0	.0	.0		1.2	5.6	.5	.0	.9	1.2	1.7	.7	1.5	1.3	
E	.4	.9	.3	.2	.0	.0		1.7	9.4	1.4	.0	.9	1.2	3.2	.0	1.9	1.6	
SE	.6	3.7	5.6	2.2	.2	.0		12.3	14.6	11.7	13.9	11.8	13.9	12.5	.0	12.3	12.8	
S	3.1	17.8	23.2	8.2	.6	.0		53.0	13.7	57.3	68.1	56.3	49.6	53.8	34.9	48.9	54.2	
SW	1.2	6.1	4.5	1.0	.0	.0		12.9	10.8	14.8	12.5	12.8	11.2	9.4	31.6	14.4	12.3	
W	1.1	2.0	.2	.0	.0	.0		3.3	3.3	2.4	.0	2.9	3.9	2.9	23.0	3.2	3.4	
NW	1.3	3.1	.7	.0	.0	.0		5.1	6.4	3.8	.0	4.4	5.0	5.0	2.6	6.4	5.5	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	4.4	.0	.0	.0	.0	.0		4.4	.0	3.9	5.6	3.9	7.4	4.9	2.6	3.7	3.7	
TOT OBS	319	1408	1320	440	30	0	3717		11.6	617	18	616	461	617	38	945	405	
TOT PCT	14.0	37.9	35.5	11.8	.8	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
		7-16	17-27	28-40	00 03					06 09	12 15	18 21		
N	3.3	2.4	.4	.0	.0		6.1	7.3	4.0	6.3	6.6	6.8		
NE	.8	.3	.0	.0	.0		1.2	5.6	.5	1.0	1.6	1.4		
E	.9	.4	.3	.1	.0		1.7	9.4	1.3	1.0	3.1	1.8		
SE	2.2	4.9	4.2	1.0	.1		12.3	14.6	11.8	12.7	11.8	12.6		
S	10.6	23.2	18.4	2.8	.0		53.0	13.7	57.6	53.4	52.7	50.5		
SW	4.3	6.0	2.4	.3	.0		12.9	10.8	14.7	12.1	10.6	13.8		
W	2.3	.9	.0	.0	.0		3.3	5.3	2.4	3.3	4.0	3.3		
NW	3.2	1.7	.2	.0	.0		5.1	6.4	3.7	4.7	4.9	6.1		
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		
CALM	4.4						4.4	.0	3.9	5.4	4.7	3.7		
TOT OBS	1194	1480	886	155	2	3717		11.6	635	1077	655	1350		
TOT PCT	32.1	39.8	23.8	4.2	.1		100.0		100.0	100.0	100.0	100.0		

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				40+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47					
0000Z	3.9	8.7	35.0	38.4	12.9	1.1	.0	12.4	100.0	625	
0600Z	5.4	9.0	37.3	34.9	12.7	.6	.0	11.7	100.0	1077	
1200Z	4.7	11.6	39.8	32.8	9.8	1.2	.0	11.1	100.0	655	
1800Z	3.7	9.4	38.7	35.9	11.6	.6	.0	11.3	100.0	1350	
TOT	164	255	1408	1320	440	30	0	11.6		3717	
PCT	4.4	9.6	37.9	35.5	11.8	.8	.0	100.0			

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 78SCD	TOTAL OBS	MEAN CLOUD COVER
N	.7	.1	1.4	2.4	6.5	
NE	.2	.0	.2	.2	4.9	
E	.0	.0	.3	.4	7.6	
SE	1.0	.6	1.2	2.2	5.7	
S	23.3	7.8	13.4	24.6	4.7	
SW	4.5	1.3	2.3	6.3	5.0	
W	.2	.2	.0	1.2	6.3	
NW	.3	.0	.3	1.4	6.4	
VAR	.0	.0	.0	.0	.0	
CALM	.1	.0	.7	.9	6.7	
TOT OBS	205	58	134	267	674	5.0
TOT PCT	30.4	10.1	19.9	39.6	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	2500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.0	.4	.4	1.7	.9	.0	.0	.0	.0	1.2	
NE	.0	.0	.0	.1	.1	.1	.0	.0	.0	.0	.3	
E	.0	.0	.0	.4	.3	.0	.0	.0	.0	.0	.0	
SE	.0	.1	.0	.6	2.1	.4	.1	.1	.0	.0	1.7	
S	.3	.0	1.0	7.4	16.5	7.3	1.3	.1	.0	.3	34.9	
SW	.0	.1	.7	2.0	2.9	1.9	.4	.1	.0	.6	6.3	
W	.0	.0	.0	.1	.6	.4	.0	.0	.0	.0	.4	
NW	.0	.0	.0	.4	.7	.4	.0	.0	.0	.0	.4	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.3	.3	.6	.1	.0	.0	.0	.4	
TOT OBS	2	2	14	79	170	82	13	2	0	2	308	674
TOT PCT	.3	.3	2.1	11.7	25.2	12.2	1.9	.3	.0	.3	45.7	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)				VSBY (NM)				VSBY (NM)			
	>10	>5	>2	>1	>10	>5	>2	>1	>10	>5	>2	>1
>4500	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3
>3000	.3	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
>2500	2.3	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
>2000	12.7	15.1	15.1	15.1	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3
>1000	31.7	39.4	39.9	39.9	40.0	40.0	40.0	40.2	40.2	40.2	40.2	40.2
>600	40.5	50.8	51.4	51.4	51.3	51.3	51.3	51.7	51.7	51.7	51.7	51.7
>300	41.6	53.0	53.7	53.7	53.9	53.9	53.9	54.0	54.0	54.0	54.0	54.0
>150	41.8	53.3	54.0	54.0	54.1	54.1	54.1	54.3	54.3	54.3	54.3	54.3
>0	41.9	53.4	54.1	54.1	54.3	54.3	54.3	54.6	54.6	54.6	54.6	54.6
TOTAL	288	367	372	372	373	373	373	375	375	375	375	375

TOTAL NUMBER OF OBS: 687

PCT FREQ NH <5/8: 45.4

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	8 OBSCD	TOTAL OBS
	16.8	9.0	8.5	6.2	3.6	3.8	9.0	7.3	35.8	.0	730

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.3
	TOT %	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.3
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0	.0	.3
	TOT %	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0	.0	.3
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1
	NO PCP	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.1	.1
	TOT %	.0	.0	.0	.0	.0	.0	.1	.1	.0	.1	.3	.3
2<5	PCP	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.3
	NO PCP	.1	.0	.0	.3	.3	.1	.0	*	.0	.0	.8	.8
	TOT %	.1	.0	.0	.4	.4	.1	.0	*	.0	.0	1.0	1.0
5<10	PCP	.1	.0	.0	.0	.9	.3	.0	.0	.0	.0	1.4	1.4
	NO PCP	1.3	.1	.3	.7	9.8	3.1	1.2	.4	.0	.4	17.0	17.0
	TOT %	1.4	.1	.3	.7	10.7	3.5	1.2	.4	.0	.4	18.4	18.4
10+	PCP	.0	.0	.1	.0	.0	.3	.0	.3	.0	.0	.6	.6
	NO PCP	3.1	.4	.4	3.8	56.1	10.9	1.3	1.5	.0	1.6	79.2	79.2
	TOT %	3.1	.4	.5	3.8	56.1	11.2	1.3	1.8	.0	1.6	79.8	79.8
TOT OBS													799
TOT PCT		4.5	.5	.8	4.9	67.6	14.7	2.6	2.2	.0	2.1	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	.2
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	.2
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	*	.1	*	.0	.0	.0	.0	.2	.2
	11-21	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	*	.2	*	.0	.0	.0	.0	.3	.3
1<2	0-3	.0	.0	.0	*	*	.0	*	*	.0	.1	.3	.3
	4-10	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.1	.0	.0	*	*	.0	*	*	.0	.1	.4	.4
2<5	0-3	.2	.0	.0	.0	.1	*	.0	.0	.0	.1	.5	.5
	4-10	.1	.0	.0	.1	.5	.3	.1	*	.0	.0	1.1	1.1
	11-21	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0	.3	.3
	22+	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1	.1
	TOT %	.3	.0	.0	.3	.8	.4	.1	*	.0	.1	1.9	1.9
5<10	0-3	.6	*	.0	.1	.5	.5	.5	.3	.0	1.0	3.5	3.5
	4-10	.9	.1	.1	.3	3.5	1.5	.3	.3	.0	.0	6.9	6.9
	11-21	.3	.0	.1	.1	4.8	1.9	.1	.0	.0	.0	7.4	7.4
	22+	.1	.0	.0	*	2.0	.3	.0	.0	.0	.0	2.4	2.4
	TOT %	1.8	.1	.2	.6	10.8	4.2	.9	.6	.0	1.0	20.1	20.1
10+	0-3	.3	.0	.1	.4	2.0	.6	.1	.3	.0	3.5	7.3	7.3
	4-10	2.3	.5	.6	1.3	13.8	4.6	1.2	1.2	.0	.0	27.6	27.6
	11-21	.3	*	.0	1.3	24.0	4.9	.0	.2	.0	.0	30.8	30.8
	22+	.1	.0	.0	.1	9.8	1.4	.0	.0	.0	.0	11.4	11.4
	TOT %	3.0	.5	.7	3.4	51.6	11.4	1.3	1.7	.0	3.5	77.1	77.1
TOT OBS													1043
TOT PCT		5.2	.6	.9	4.3	63.6	16.0	2.3	2.3	.0	4.7	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY MGT	TOTAL OBS
00003	.5	.0	2.2	12.1	17.0	10.4	1.6	.0	.0	.5	44.5	55.5	182
06009	.0	.0	.7	8.8	23.7	13.5	.7	.0	.0	.0	51.4	48.6	148
12015	.6	.0	4.5	12.9	34.8	14.0	2.2	.0	.0	.0	69.1	30.9	178
18021	.0	1.1	1.6	11.1	21.6	10.0	3.7	1.1	.0	.5	50.5	49.5	190
TOT	2	2	16	79	172	86	15	2	0	2	376	322	698
PCT	.3	.3	2.3	11.3	24.6	12.3	2.1	.3	.0	.3	53.9	46.1	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.4	.0	.4	1.2	18.1	79.9	249
06009	.0	.7	.0	.7	21.2	77.3	269
12015	.4	.4	.8	3.4	22.8	72.2	263
18021	.0	.0	.3	2.1	19.6	78.0	286
TOT	2	3	4	20	218	820	1067
PCT	.2	.3	.4	1.9	20.4	76.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING MGT (FEET, NM >4/8), BY HOUR

HR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.6	2.8	15.6	29.4	55.0	180
06009	.0	.7	10.3	41.8	47.9	146
12015	.6	6.3	20.1	50.0	29.9	174
18021	.0	2.7	14.4	37.4	48.1	187
TOT	2	22	105	271	311	687
PCT	.3	3.2	15.3	39.4	45.3	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.0	.0	.5	.1	.4	.4	11	1.5
60/64	.0	.0	.0	.4	2.0	3.3	3.8	.4	75	9.9
55/59	.0	.0	.0	.4	3.6	18.6	31.8	10.4	491	64.8
50/54	.0	.0	.0	.0	2.2	3.3	11.3	6.9	180	23.7
45/49	.0	.0	.0	.0	.0	.0	.0	.1	1	.1
TOTAL	0	0	0	6	63	192	359	138	758	100.0
PCT	.0	.0	.0	.8	8.3	25.3	47.4	18.2		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	.0	.0	.0	.2	.6	.4	.3	.0	.0	.0
60/64	.8	.1	.0	.7	8.4	1.2	.1	.4	.0	.3
55/59	4.3	.3	.5	3.0	42.3	9.4	1.2	2.2	.0	1.6
50/54	.3	.0	.4	1.2	17.8	3.3	.5	.0	.0	.3
45/49	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
TOTAL	5.3	.5	.9	5.0	67.2	14.2	2.0	2.6	.0	2.1

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	66	64	60	56	53	52	49	56.3	636
06009	66	60	59	55	52	50	49	55.2	1072
12015	68	64	61	56	52	51	50	56.1	646
18021	76	68	64	58	54	53	51	58.6	1251
TOT	76	66	63	56	53	51	49	56.8	3605

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.0	7.4	26.0	48.0	18.6	83	204
06009	.0	.6	4.4	18.3	52.8	23.9	84	180
12015	.0	.0	9.1	22.7	47.5	20.7	83	198
18021	.0	2.5	12.5	34.0	40.0	11.0	79	200
TOT	0	6	66	199	367	144	82	782

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(OVER-ALL) 1868-1977

AREA 0029 COQUIMBO
28.35 72.3W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	65 68	TOT	N FOG	WD FOG
11/13	.0	.0	.0	.1	.3	3	.0	.4
9/10	.0	.0	.0	.7	.1	6	.1	.7
7/8	.0	.0	.0	.9	.4	10	.0	1.3
6	.0	.0	.9	.3	.4	12	.0	1.6
5	.0	.4	1.6	1.3	.1	26	.0	3.5
4	.0	.5	2.7	1.2	.1	34	.1	4.4
3	.0	.8	2.9	.4	.0	31	.0	4.1
2	.0	2.8	4.9	.4	.1	62	.3	8.0
1	.1	5.3	5.2	.4	.0	83	.1	10.9
0	.4	10.0	5.7	.1	.1	123	.3	16.2
-1	.4	10.4	4.1	.4	.0	115	.0	15.4
-2	.5	8.1	2.3	.0	.0	82	.1	10.8
-3	.5	6.0	2.3	.0	.0	66	.0	8.8
-4	1.2	4.5	1.3	.0	.0	33	.3	6.8
-5	.7	3.2	.1	.0	.0	30	.0	4.0
-6	.1	.5	.3	.0	.0	7	.0	.9
-7/-8	.3	.0	.0	.0	.0	2	.0	.3
-9/-10	.1	.4	.0	.0	.0	4	.0	.5
TOTAL	33	258	13	13	749	10	739	
PCT	4.4	53.1	34.4	6.3	1.7	100.0	1.3	98.7

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.5	.6	.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	1.2	.8	.0	.0	.0	2.0	.0	.4	.0	.0	.0	.0	.4
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.6	.3	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	2.3	1.0	.3	.0	.0	4.1	.0	.4	.0	.0	.0	.0	.4

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	.8
1-2	.0	.3	.3	.0	.0	.0	.6	.0	.8	.1	.0	.0	.0	.8
3-4	.0	.3	.0	.0	.0	.0	.3	.0	.1	.7	.0	.0	.0	.8
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.1	1.1	.1	.0	.0	1.2
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0	.0	.4
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.6	.3	.0	.0	.0	.8	.0	1.7	2.2	.6	.0	.0	4.4

PERIOD: (OVER-ALL) 1963-1977

SEPTEMBER

AREA 0029 COQUIMBO
28.55 72.3W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	1.5	4.0	.0	.0	.0	.0	5.5	.2	1.0	.0	.0	.0	.0	1.2
1-2	.0	8.2	5.0	.0	.0	.0	13.8	.0	1.7	1.2	.0	.0	.0	2.9
3-4	.0	5.5	10.5	1.6	.0	.0	17.6	.3	1.7	1.7	.1	.0	.0	3.8
5-6	.0	1.9	9.9	1.9	.0	.0	13.8	.3	.1	1.7	.4	.0	.0	2.4
7	.3	.5	6.6	3.1	.3	.0	10.7	.0	.1	1.0	.1	.0	.0	1.2
8-9	.0	.0	1.0	1.4	.6	.0	3.0	.0	.3	.1	.1	.0	.0	.5
10-11	.0	.3	1.0	2.8	.2	.0	4.3	.0	.0	.1	.5	.1	.0	.6
12	.0	.0	.3	.3	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.5	.0	.0	.5	.0	.0	.0	.1	.0	.0	.1
17-19	.0	.0	.0	.7	.3	.0	1.0	.0	.0	.0	.1	.0	.0	.1
20-22	.0	.0	.2	.4	.0	.0	.6	.0	.0	.1	.1	.0	.0	.2
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	2.3	20.4	34.6	12.7	1.3	.0	71.4	.8	4.8	5.9	1.6	.1	.0	13.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.2	.8	.0	.0	.0	.0	1.0	.3	.3	.0	.0	.0	.0	.6	
1-2	.0	1.0	.0	.0	.0	.0	1.0	.0	.6	.3	.0	.0	.0	.9	
3-4	.0	.4	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.2	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.2	2.4	.0	.0	.0	.0	2.6	.3	.8	.3	.0	.0	.0	1.5	98.3

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	4.6	7.7	.0	.0	.0	.0	12.3	
1-2	.8	13.9	7.7	.0	.0	.0	22.4	
3-4	.3	7.4	12.8	1.6	.0	.0	22.7	
5-6	.3	2.7	12.8	2.5	.0	.0	18.3	
7	.3	.5	7.9	3.3	.3	.0	12.3	
8-9	.0	.3	1.1	2.2	.5	.0	4.1	
10-11	.0	.3	1.1	3.3	.3	.0	4.9	
12	.0	.0	.3	.3	.0	.0	.5	
13-16	.0	.0	.0	.5	.0	.0	.5	
17-19	.0	.0	.0	.8	.3	.0	1.1	
20-22	.0	.0	.3	.5	.0	.0	.8	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	6.3	33.3	44.0	15.0	1.4	.0	100.0	366

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.8	5.9	7.9	7.0	3.3	.5	1.2	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	167	4
6-7	.0	.5	4.5	7.0	7.4	2.8	4.3	1.5	.8	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	177	7
8-9	.2	.3	1.7	5.5	4.3	2.7	2.7	1.3	2.5	.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	131	8
10-11	.0	.0	.8	1.2	2.0	2.2	.2	.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	43	7
12-13	.0	.0	.3	.7	.8	.3	.5	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	18	7
>13	.0	.0	.0	.2	.7	.2	.3	.0	.5	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	12	11
INDET	1.0	.8	1.2	1.0	2.7	.3	.2	.5	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	50	6
TOTAL	18	45	98	135	127	54	56	24	29	8	4	0	0	0	0	0	0	0	0	598	6
PCT	3.0	7.5	16.4	22.6	21.2	9.0	9.4	4.0	4.8	1.3	.7	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1864-1977

OCTOBER

AREA 0029 COQUIMBO
28.55 72.1W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRIG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	BLWG DUST BLWG SNOW	NO SIG WEA
N	2.9	.0	.0	.0	.0	.0	.0	2.9	2.9	4.4	2.9	.0	.0	.0	89.7
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
E	.0	.0	.0	.0	.0	.0	.0	.0	20.0	.0	20.0	.0	.0	.0	60.0
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
S	.6	.0	1.6	.0	.0	.0	.0	1.9	.6	.0	1.2	.0	1.9	.0	94.5
SW	1.0	.0	.7	.0	.0	.0	.0	1.7	1.0	.0	1.2	.0	3.0	.0	93.1
W	.0	.0	.0	.0	.0	.0	.0	.0	4.4	.0	.0	.0	.0	.0	95.6
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.4	.0	.0	.0	.0	97.6
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.4	.0	6.9	.0	89.7
TOT PCT	.7	.0	1.1	.0	.0	.0	.0	1.6	1.0	.3	1.4	.0	2.0	.0	93.9
TOT OBS:	732														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00003	.6	.0	.0	.0	.0	.0	.0	.6	.6	.6	1.2	.0	2.9	.0	94.2
06009	1.0	.0	2.6	.0	.0	.0	.0	3.1	1.0	.0	.5	.0	2.1	.0	93.3
12015	1.1	.0	1.6	.0	.0	.0	.0	2.7	1.6	.5	2.7	.0	.5	.0	92.3
18021	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	1.0	.0	2.6	.0	95.9
TOT PCT	.7	.0	1.1	.0	.0	.0	.0	1.6	.9	.3	1.3	.0	2.0	.0	93.9
TOT OBS:	742														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47		00					03	06	09	12	15	18	21
N	.9	2.1	.8	.0	.0	.0		3.8	7.0	1.7	.0	2.8	4.0	6.2	4.2	5.2	1.8	
NE	.4	.6	.2	.0	.0	.0		1.1	5.8	.5	.0	.9	1.8	1.6	4.2	1.5	.2	
E	.5	.4	.2	.0	.0	.0		1.1	5.9	.8	.0	.6	1.3	2.0	.0	1.1	1.0	
SE	1.1	3.8	4.0	1.4	1.1	.0		10.4	12.3	9.3	5.9	7.9	12.5	11.0	7.3	11.1	11.4	
S	4.2	20.4	25.5	5.7	.2	.0		56.0	12.5	59.6	73.5	61.8	56.3	55.3	49.0	50.1	55.4	
SW	1.9	8.2	5.6	.9	.0	.0		16.6	10.0	17.5	14.7	16.7	14.5	14.8	16.7	17.9	17.3	
W	1.0	1.5	.3	.0	.0	.0		2.8	5.4	2.4	.0	1.6	.9	1.7	2.1	4.8	4.0	
NW	.9	1.8	.4	.0	.0	.0		3.1	5.9	3.2	.0	2.3	1.8	2.5	3.3	3.6	5.0	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	5.1							5.1	.0	4.9	5.9	5.4	6.9	5.0	8.3	4.6	3.9	
TOT OBS	370	1371	1300	284	12	0	3537		10.7	589	17	597	448	564	24	885	413	
TOT PCT	16.1	38.8	36.8	8.0	.3	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40					00 03	06 09	12 15	18 21	
N	2.1	1.6	.1	.0	.0		3.8	7.0	1.7	3.3	6.1	4.1	
NE	.7	.4	.0	.0	.0		1.1	5.8	.5	1.3	1.7	1.1	
E	.8	.2	.0	.0	.0		1.1	5.9	.8	.9	1.9	1.1	
SE	2.7	4.5	3.0	.2	.0		10.4	12.3	9.2	9.9	10.9	11.2	
S	13.2	25.4	15.7	1.7	.0		56.0	12.5	60.0	59.4	55.0	51.8	
SW	5.8	8.1	2.6	.1	.0		16.6	10.0	17.4	15.8	14.9	17.7	
W	2.2	.5	.1	.0	.0		2.8	5.4	2.4	1.3	1.7	4.6	
NW	2.1	.9	.1	.0	.0		3.1	5.9	3.1	2.1	2.7	4.0	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	5.1						5.1	.0	5.0	6.0	5.1	4.4	
TOT OBS	1229	1471	764	71	2	3537		10.7	606	1045	588	1298	
TOT PCT	34.7	41.6	21.6	2.0	.1		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1864-1977

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000Z	5.0	8.9	35.1	40.6	9.6	.8	.0	11.5	100.0	606
0600Z	6.0	11.5	35.6	38.1	8.6	.2	.0	10.8	100.0	1045
1200Z	5.1	12.1	40.6	34.0	7.8	.3	.0	10.3	100.0	588
1800Z	4.4	11.2	42.1	35.1	6.9	.2	.0	10.4	100.0	1298
TOT	180	390	1371	1300	284	12	0	10.7		3537
PCT	5.1	11.0	38.8	36.8	8.0	.3	.0		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & ObsCD	TOTAL OBS	MEAN CLOUD COVER
N	.4	.0	.9	2.0		6.8
NE	.0	.0	.2	.1		6.5
E	.0	.0	.2	.7		7.8
SE	.5	.9	1.4	.4		4.8
S	16.4	7.2	13.3	25.8		5.2
SW	4.7	3.6	3.6	9.0		5.2
W	.3	.1	.3	2.3		6.9
NW	.4	.4	.0	.9		5.4
VAR	.0	.0	.0	.0		.0
CALM	.9	.0	.0	3.0		6.3
TOT OBS	133	68	111	248	560	5.4
TOT PCT	23.8	12.1	19.8	44.3	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	2500 4999	3000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.0	.0	.8	.5	1.2	.0	.2	.0	.1	.4	
NE	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	
E	.0	.0	.0	.2	.0	.7	.0	.0	.0	.0	.0	
SE	.0	.0	.0	.0	.7	.3	.4	.0	.0	.0	1.8	
S	.4	.1	2.7	6.3	17.0	6.0	1.4	.7	.0	.7	27.5	
SW	.2	.5	2.6	3.8	2.2	.2	.0	.0	.0	.4	11.0	
W	.0	.0	.4	.4	1.5	.4	.0	.0	.0	.0	.4	
NW	.0	.0	.0	.0	.7	.0	.0	.0	.2	.0	.8	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.2	.0	.0	.0	1.1	.4	.2	.0	.0	.9	.9	
TOT OBS	4	1	20	60	142	63	12	5	1	12	240	560
TOT PCT	.7	.2	3.6	10.7	25.4	11.3	2.1	.9	.2	2.1	42.9	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	1.8	2.3	2.3	2.3	2.3	2.3	2.3	2.3
>5000	2.6	3.2	3.2	3.2	3.2	3.2	3.2	3.2
>3500	4.8	5.3	5.3	5.3	5.3	5.3	5.3	5.3
>2000	13.9	16.2	16.7	16.7	16.7	16.7	16.7	16.7
>1000	35.0	41.5	42.3	42.3	42.3	42.3	42.3	42.3
>600	42.6	51.4	52.8	52.8	52.8	52.8	52.8	52.8
>300	44.9	54.9	56.3	56.3	56.3	56.3	56.3	56.3
>150	45.1	55.1	56.5	56.5	56.5	56.5	56.5	56.5
>0	45.6	55.6	57.2	57.2	57.2	57.2	57.2	57.2
TOTAL	239	316	325	325	325	325	325	325

TOTAL NUMBER OF OBS 568

PCT FREQ NH <5/8 42.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
	11.2	11.2	7.2	7.8	5.0	4.3	5.0	8.2	40.2	600

AD-A064 027

NAVAL WEATHER SERVICE DETACHMENT ASHEVILLE N C
SUMMARY OF SYNOPTIC METEOROLOGICAL OBSERVATIONS (SSMO), SOUTH A--ETC(U)
FEB 79

F/G 4/2

UNCLASSIFIED

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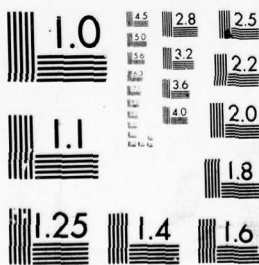
5 of 6
AD
A064 027

Frame 1	Frame 2	Frame 3	Frame 4	Frame 5	Frame 6	Frame 7	Frame 8	Frame 9	Frame 10	Frame 11	Frame 12
Frame 13	Frame 14	Frame 15	Frame 16	Frame 17	Frame 18	Frame 19	Frame 20	Frame 21	Frame 22	Frame 23	Frame 24
Frame 25	Frame 26	Frame 27	Frame 28	Frame 29	Frame 30	Frame 31	Frame 32	Frame 33	Frame 34	Frame 35	Frame 36
Frame 37	Frame 38	Frame 39	Frame 40	Frame 41	Frame 42	Frame 43	Frame 44	Frame 45	Frame 46	Frame 47	Frame 48
Frame 49	Frame 50	Frame 51	Frame 52	Frame 53	Frame 54	Frame 55	Frame 56	Frame 57	Frame 58	Frame 59	Frame 60
Frame 61	Frame 62	Frame 63	Frame 64	Frame 65	Frame 66	Frame 67	Frame 68	Frame 69	Frame 70	Frame 71	Frame 72
Frame 73	Frame 74	Frame 75	Frame 76	Frame 77	Frame 78	Frame 79	Frame 80	Frame 81	Frame 82	Frame 83	Frame 84
Frame 85	Frame 86	Frame 87	Frame 88	Frame 89	Frame 90	Frame 91	Frame 92	Frame 93	Frame 94	Frame 95	Frame 96
Frame 97	Frame 98	Frame 99	Frame 100	Frame 101	Frame 102	Frame 103	Frame 104	Frame 105	Frame 106	Frame 107	Frame 108
Frame 109	Frame 110	Frame 111	Frame 112	Frame 113	Frame 114	Frame 115	Frame 116	Frame 117	Frame 118	Frame 119	Frame 120

1 F I E D

5 OF 6

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A0 64 027



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1864-1977

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TABLE 8

AREA 0029 COQUIMBO
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PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.3
	TOT %	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.3
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2<5	PCP	.0	.0	.0	.0	.3	.2	.0	.0	.0	.0	.5	.5
	NO PCP	.5	.0	.0	.0	.1	.4	.0	.1	.0	.3	1.5	2.0
	TOT %	.5	.0	.0	.0	.5	.6	.0	.1	.0	.3	2.0	2.5
5<10	PCP	.1	.0	.0	.0	.4	.1	.0	.0	.0	.0	.7	.7
	NO PCP	1.7	.4	.3	.4	11.6	4.6	.9	1.4	.0	1.1	22.4	29.1
	TOT %	1.8	.4	.3	.4	12.1	4.7	.9	1.4	.0	1.1	23.1	30.1
10+	PCP	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.4	.4
	NO PCP	2.1	.2	.4	2.3	48.1	15.0	2.2	1.3	.0	2.6	74.2	79.2
	TOT %	2.1	.2	.4	2.3	48.5	15.0	2.2	1.3	.0	2.6	74.6	80.0
TOT OBS													
TOT PCT		4.6	.6	.7	2.6	61.2	20.3	3.1	2.9	.0	4.0	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.2	.2
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.2	.2
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1
	4-10	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.4	.4
	11-21	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.2	.1	.0	.0	.0	.1	.6	.6
2<5	0-3	.0	.0	.0	.0	.2	.1	.0	.0	.0	.9	1.2	1.2
	4-10	.4	.0	.0	.0	.6	.6	.0	.1	.0	.0	1.6	1.6
	11-21	.0	.0	.0	.0	.3	.2	.0	.0	.0	.0	.5	.5
	22+	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	.1
	TOT %	.4	.0	.0	.0	1.1	.9	.0	.1	.0	.9	3.4	3.4
5<10	0-3	.0	.1	.0	.0	1.2	.4	.2	.2	.0	1.4	3.6	3.6
	4-10	.5	.2	.1	.2	4.2	2.7	.7	.8	.0	.0	9.3	9.3
	11-21	1.0	.0	.1	.1	4.4	1.1	.0	.2	.0	.0	6.9	6.9
	22+	.0	.0	.0	.0	1.8	.1	.0	.0	.0	.0	1.9	1.9
	TOT %	1.4	.3	.2	.4	11.5	4.3	.9	1.3	.0	1.4	21.8	21.8
10+	0-3	.4	.0	.2	.1	1.5	.8	.5	.7	.0	3.8	7.9	7.9
	4-10	1.2	.1	.0	.8	14.5	7.3	1.4	.6	.0	.0	26.0	26.0
	11-21	.4	.1	.0	.4	23.4	7.1	.5	.3	.0	.0	32.2	32.2
	22+	.0	.0	.1	.4	6.0	1.3	.0	.0	.0	.0	7.9	7.9
	TOT %	2.1	.3	.3	1.7	45.5	16.6	2.3	1.5	.0	3.8	74.0	74.0
TOT OBS													
TOT PCT		4.1	.6	.5	2.2	58.5	21.9	3.2	2.9	.0	6.2	100.0	

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PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1864-1977AREA 0029 COQUIMBO
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00603	.0	.0	2.1	9.0	24.1	11.0	1.4	1.4	.7	1.4	51.0	49.0	145
06609	.7	.0	5.1	12.5	24.3	8.1	2.9	1.5	.0	2.2	57.4	42.6	136
12615	.7	.7	5.4	10.8	31.8	17.6	2.0	.0	.0	2.0	70.9	29.1	148
18621	1.3	.0	1.3	9.3	20.0	8.0	2.0	.7	.0	2.7	45.3	54.7	150
TOT	4	1	20	60	145	65	12	5	1	12	325	254	579
PCT	.7	.2	3.5	10.4	25.0	11.2	2.1	.9	.2	2.1	56.1	43.9	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00603	.0	.4	.4	.9	17.6	80.6	227
06609	.0	.0	1.1	6.0	20.7	72.3	285
12615	.0	.4	.4	3.5	22.6	73.0	230
18621	.3	.0	.3	2.6	24.8	71.9	306
TOT	1	2	6	35	227	777	1048
PCT	.1	.2	.6	3.3	21.7	74.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00603	.0	2.1	11.3	41.1	47.5	141
06609	.8	6.1	19.7	39.4	40.9	132
12615	.7	6.8	18.9	52.0	29.1	148
18621	1.4	2.7	12.9	33.3	53.7	147
TOT	4	25	89	236	243	568
PCT	.7	4.4	15.7	41.5	42.8	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
70/74	.0	.0	.0	.1	.0	.0	.0	.0	1	.1
65/69	.0	.0	.0	.3	1.2	.3	.6	.0	16	2.4
60/64	.0	.0	.0	.4	3.1	8.4	6.5	1.0	132	19.5
55/59	.0	.0	.1	.3	3.8	16.7	36.8	12.3	474	70.1
50/54	.0	.0	.0	.0	.1	1.0	4.0	2.7	53	7.8
TOTAL	0	0	1	8	56	179	324	108	676	100.0
PCT	.0	.0	.1	1.2	8.3	26.5	47.9	16.0		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
70/74	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
65/69	.3	.0	.0	.1	1.4	.4	.0	.1	.0	.0
60/64	.7	.2	.4	.7	10.8	4.4	.9	.9	.0	.6
55/59	3.0	.5	.4	2.6	42.8	13.5	1.7	2.0	.0	3.7
50/54	.7	.1	.0	.1	4.7	1.6	.4	.2	.0	.0
TOTAL	4.6	.9	.9	3.5	59.8	19.9	3.0	3.1	.0	4.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00603	64	63	61	57	54	52	51	57.4	606
06609	64	62	60	56	53	52	47	59.6	1048
12615	66	64	61	57	54	52	51	57.3	581
18621	75	69	66	60	56	54	52	60.3	1162
TOT	75	67	64	58	54	52	47	58.1	3397

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00603	.0	1.3	3.2	26.1	51.6	17.8	83	137		
06609	.0	1.7	6.2	19.1	49.4	23.6	84	178		
12615	.0	.0	7.8	25.9	49.4	16.9	83	166		
18621	.0	2.2	15.5	34.3	40.9	7.2	78	181		
TOT	0	9	57	180	325	111	82	682		

PERIOD: (PRIMARY) 1968-1977
(OVER-ALL) 1864-1977

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	65 68	69 72	TOT	N FOG	NO FOG
17/19	.0	.0	.0	.0	.0	.1	1	.0	.1
11/13	.0	.0	.1	.0	.7	.1	7	.0	1.0
9/10	.0	.0	.1	.4	.3	.0	6	.0	.9
7/8	.0	.0	.1	.7	.3	.0	8	.0	1.2
6	.0	.0	.0	.9	.4	.0	9	.0	1.3
5	.0	.0	.0	1.0	.0	.0	7	.0	1.0
4	.0	.4	3.1	1.6	.3	.0	37	.1	5.3
3	.0	1.0	3.4	1.5	.0	.0	40	.0	5.9
2	.0	.7	6.1	1.9	.1	.0	60	.0	8.9
1	.0	3.4	5.6	1.3	.0	.0	70	.1	10.3
0	.1	8.6	8.8	.7	.0	.0	123	.3	18.0
-1	.0	5.1	9.4	.4	.0	.0	100	.4	14.4
-2	.0	5.3	5.8	.3	.0	.0	77	.0	11.4
-3	.0	4.3	4.9	.1	.0	.0	63	.0	9.4
-4	.9	3.6	1.9	.1	.0	.0	44	.0	6.5
-5	.0	1.6	.3	.0	.0	.0	13	.0	1.9
-6	.1	.7	.0	.0	.0	.0	2	.1	.7
-7/-8	.1	.1	.0	.0	.0	.0	2	.0	.3
TOTAL	9		335		15		673	8	665
PCT	1.3	35.1	49.8	11.3	2.2	.3	100.0	1.2	98.8

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
41	.0	.6	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
1-2	.2	2.5	1.1	.0	.0	.0	3.9	.0	.1	.4	.0	.0	.0	.5
3-4	.0	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.2	3.5	1.1	.0	.0	.0	4.9	.0	.1	.4	.0	.0	.0	.5

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
41	.0	.0	.0	.0	.0	.0	.0	.3	.2	.0	.0	.0	.0	.5
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.3
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.6
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.6
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.6
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.3	.3	1.3	1.0	.0	.0	3.1

PERIOD: (OVER-ALL) 1963-1977

OCTOBER

TABLE 18 (CONT)

AREA 0029 COQUIMBO
28.5S 72.1W

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	1.9	3.3	3.0	.0	.0	.0	5.2	.1	1.1	.0	.0	.0	.0	1.1
1-2	1.3	4.4	3.9	.0	.0	.0	9.6	.3	5.2	1.6	.0	.0	.0	7.1
3-4	.0	5.0	10.4	.3	.0	.0	15.7	.0	2.6	3.4	.3	.0	.0	6.3
5-6	.0	.8	10.4	1.9	.0	.0	13.1	.0	.2	3.3	.1	.0	.0	3.6
7	.0	.2	5.8	2.4	.0	.0	8.5	.0	.7	.1	.2	.0	.0	1.0
8-9	.0	.0	2.4	2.4	.6	.0	5.6	.0	.0	.3	.9	.0	.0	1.2
10-11	.0	.0	.8	1.2	.0	.0	2.0	.0	.0	.2	1.1	.0	.0	1.2
12	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.1	.0	.0	.1
13-16	.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	3.2	13.8	33.9	8.8	.6	.0	60.3	.4	9.7	8.9	2.6	.0	.0	21.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.3	.0	.0	.0	.0	.0	.3	.6	.6	.0	.0	.0	.0	1.3	
1-2	.0	.6	.0	.0	.0	.0	.6	.1	.1	.1	.0	.0	.0	.2	
3-4	.0	.3	.3	.0	.0	.0	.6	.0	.3	.3	.0	.0	.0	.6	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.3	.9	.3	.0	.0	.0	1.5	.7	1.1	.4	.0	.0	.0	2.2	

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	9.3	5.8	.0	.0	.0	.0	15.1	
1-2	2.6	12.9	7.1	.0	.0	.0	22.5	
3-4	.0	9.7	14.5	.6	.0	.0	23.8	
5-6	.0	1.0	16.1	1.9	.0	.0	17.0	
7	.0	1.0	6.4	2.6	.0	.0	10.0	
8-9	.0	.0	2.9	3.5	.6	.0	7.1	
10-11	.0	.0	1.0	2.9	.0	.0	3.9	
12	.0	.0	.0	.3	.0	.0	.3	
13-16	.0	.0	.0	.3	.0	.0	.3	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	11.9	29.3	46.0	12.2	.6	.0	100.0	311

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.9	5.6	7.7	4.2	2.9	1.7	1.2	.2	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	134	4
6-7	.0	1.0	5.8	9.2	4.2	5.2	1.7	1.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	148	6
8-9	.0	.2	1.5	5.0	4.4	4.6	4.8	.8	1.3	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	120	8
10-11	.0	.2	.4	1.5	1.9	1.0	1.5	.4	.8	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	41	8
12-13	.0	.0	.4	.6	1.7	.6	.2	.2	.2	.4	.0	.0	.2	.0	.0	.0	.0	.0	.0	23	9
15-19	.0	.0	.0	.0	.8	.6	.0	.4	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	10
INDET	.8	.2	1.3	1.2	2.1	.8	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	42	6
TOTAL	14	37	89	113	94	75	58	16	15	7	0	0	1	0	0	0	0	0	0	519	6
PCT	2.7	7.1	17.1	21.8	18.1	14.5	11.2	3.1	2.9	1.3	.0	.0	.2	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1871-1977

NOVEMBER

AREA 0029 COQUIMBO
28.55 72.1W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	.0	.0	7.5	.0	.0	.0	.0	7.5	10.0	.0	10.0	.0	.0	.0	72.5
NE	.0	.0	4.8	.0	.0	.0	.0	4.8	.0	.0	19.0	.0	.0	.0	76.2
E	.0	.0	.0	.0	.0	.0	.0	.0	20.0	20.0	.0	.0	.0	.0	60.0
SE	.0	.0	.0	.0	.0	.0	.0	.0	3.1	.0	.0	.0	4.6	.0	92.3
S	.4	.0	1.2	.0	.0	.0	.0	1.4	.8	.0	1.5	.2	1.0	.2	94.9
SW	.1	.0	1.7	.0	.0	.0	.0	1.7	.1	.0	1.0	.1	1.0	.0	96.0
W	.0	.0	3.6	.0	.0	.0	.0	3.6	.0	.0	.0	.0	.0	.0	96.4
NW	.0	.0	3.2	.0	.0	.0	.0	3.2	.0	.0	.0	.0	.0	.0	96.8
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.5	.0	93.5
TOT PCT	.3	.0	1.4	.0	.0	.0	.0	1.6	.9	.1	1.4	.1	1.3	.1	94.4
TOT OBS:	771														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00003	.0	.0	.5	.0	.0	.0	.0	.5	.0	.0	1.1	.0	1.6	.0	95.8
06009	.5	.0	1.6	.0	.0	.0	.0	1.6	.0	.5	1.1	.0	1.1	.0	95.6
12015	.5	.0	3.0	.0	.0	.0	.0	3.5	2.5	.0	2.5	.0	.0	.5	91.0
18021	.0	.0	.5	.0	.0	.0	.0	.5	.9	.0	.9	.5	2.4	.0	94.8
TOT PCT	.3	.0	1.4	.0	.0	.0	.0	1.5	.9	.1	1.4	.1	1.3	.1	94.5
TOT OBS:	782														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21		
N	1.2	1.5	.1	.0	.0	.0	2.8	4.7	1.4	.0	1.8	3.3	5.0	.0	3.1	2.4			
NE	.5	.4	.0	.0	.0	.0	.9	4.3	.5	.0	.7	1.1	2.2	.0	.7	.0			
E	.3	.4	.1	.1	.0	.0	.9	8.6	.7	.0	.2	1.7	1.4	.0	.7	.7			
SE	.8	3.1	4.2	2.1	.1	.0	10.2	14.6	9.1	16.1	9.2	13.7	9.1	6.3	10.5	10.8			
S	3.4	21.4	25.2	6.2	.7	.0	57.0	12.8	59.2	50.0	61.6	50.1	55.7	75.0	54.9	56.9			
SW	1.9	9.6	5.7	1.1	.0	.0	18.3	10.2	21.9	21.4	17.3	14.0	15.8	12.5	20.3	18.2			
W	.9	1.7	.2	.0	.0	.0	2.9	5.5	2.4	3.4	2.1	1.4	3.4	.0	3.4	4.8			
NW	.7	1.5	.1	.0	.0	.0	2.3	5.4	2.0	.0	2.3	3.4	1.6	.0	2.4	2.7			
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0			
CALM	4.7						4.7	.0	2.8	7.1	4.7	5.2	7.9	6.3	3.9	3.5			
TOT OBS	435	1203	1085	289	26	0	3038		11.2	532	14	512	363	519	16	768	314		
TOT PCT	14.3	39.6	35.7	9.5	.9	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	06	12	18
N	2.2	.7	.0	.0	.0		2.8	4.7	1.4	2.4	4.9	2.9
NE	.8	.1	.0	.0	.0		.9	4.3	.5	.9	2.1	.5
E	.5	.2	.1	.0	.0		.9	8.6	.7	.8	1.4	.7
SE	2.1	3.7	3.5	1.0	.0		10.2	14.6	9.2	11.1	9.0	10.6
S	12.0	28.3	14.4	2.2	.1		57.0	12.8	59.0	39.3	34.3	35.5
SW	6.0	9.6	2.3	.2	.0		18.3	10.2	21.9	16.0	13.7	19.7
W	2.2	.6	.1	.0	.0		2.9	5.5	2.5	1.9	3.3	3.8
NW	1.7	.6	.0	.0	.0		2.3	5.4	2.0	2.7	1.6	2.5
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	4.7						4.7	.0	2.9	4.9	7.9	3.8
TOT OBS	974	1329	626	104	5	3038		11.2	546	875	535	1082
TOT PCT	32.1	43.7	20.6	3.4	.2		100.0		100.0	100.0	100.0	100.0

NOVEMBER

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1871-1977AREA 0029 COQUIMBO
28.55 72.1W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)						MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47	48+			
0000Z	2.9	7.3	38.6	38.5	11.9	.7	.0	12.2	100.0	546
0600Z	4.9	9.6	35.0	37.8	11.4	1.3	.0	11.9	100.0	875
1200Z	7.9	12.7	40.7	30.5	7.7	.6	.0	10.1	100.0	535
1800Z	3.8	9.3	43.3	35.2	7.7	.7	.0	10.7	100.0	1082
TOT	142	293	1203	1085	289	26	0	11.2		3038
PCT	4.7	9.6	39.6	35.7	9.5	.9	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 9 OBS	TOTAL OBS	MEAN CLOUD COVER
N	.2	.0	.0	.4		6.4
NE	.2	.0	.2	.4		5.8
E	.2	.0	.2	.3		5.7
SE	.8	.4	1.5	1.9		5.9
S	11.5	5.1	13.2	30.0		5.9
SW	6.2	2.7	4.4	12.2		5.5
W	.7	.4	.6	1.2		5.2
NW	.5	.2	.2	.3		4.1
VAR	.0	.0	.0	.0		.0
CALM	1.1	.0	.6	2.5		6.0
TOT OBS	136	56	134	316	642	5.7
TOT PCT	21.2	8.7	20.9	49.2	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIRECTION										WIND VELOCITY									
WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH ANY	<5/8 HGT	TOTAL OBS
N	.2	.0	.2	.4	6.4	.0	.0	.0	.1	.2	.2	.0	.0	.0	.0	.0	.0	.2	
NE	.2	.0	.2	.4	5.8	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2	
E	.2	.0	.2	.4	5.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	
SE	.8	.4	1.2	1.9	5.9	.0	.0	.0	.6	.9	1.2	.3	.1	.0	.0	.0	.0	1.5	
S	11.5	5.1	13.5	30.0	5.9	.3	.0	.6	8.7	15.6	10.4	3.3	.5	.3	.2	.2	.2	19.9	
SW	.6	2.7	4.4	12.2	5.5	*	.0	.2	3.3	5.9	4.6	.4	.0	.5	.3	.3	.3	10.3	
W	.7	.4	.6	1.2	5.2	.0	.0	.0	.3	.7	.3	.1	.0	.0	.1	.0	.0	1.4	
NW	.5	.2	.2	.3	4.1	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.8	
VAR	.0	.0	.0	.0	0.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	1.1	.0	.6	2.5	6.0	.0	.0	.0	.6	.9	1.1	.2	.2	.0	.0	.0	.0	1.2	
TOT OBS	136	56	134	314	642	5.7	3	0	5	91	156	115	28	5	5	4	.0	230	642
TOT PCT	21.2	8.7	20.9	49.2	100.0		.5	.0	.8	14.2	24.3	17.9	4.4	.8	.8	.6	.0	35.8	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.6	1.1	1.4	1.4	1.4	1.4	1.4	1.4
= OR >5000	1.4	1.8	2.2	2.2	2.2	2.2	2.2	2.2
= OR >3500	5.1	5.8	6.5	6.5	6.5	6.5	6.5	6.5
= OR >2000	20.3	23.4	24.3	24.3	24.3	24.3	24.3	24.3
= OR >1000	39.2	47.2	48.3	48.5	48.5	48.5	48.5	48.5
= OR >600	49.7	61.2	62.6	62.8	62.8	62.8	62.8	62.8
= OR >300	50.2	62.0	63.4	63.5	63.5	63.5	63.5	63.5
= OR >150	50.2	62.2	63.5	63.7	63.7	63.7	63.7	63.7
= OR >0	50.3	62.5	63.8	64.2	64.2	64.2	64.2	64.2
TOTAL	327	406	415	417	417	417	417	417

TOTAL NUMBER OF OBS: 650

PCT FREQ NH <5/8: 35.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL
9.2	9.2	7.6	4.9	4.8	3.9	5.5	11.2	43.7	.0	694

NOVEMBER

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1871-1977

TABLE 8

AREA 0029 COQUIMBO
26.5S 72.1WPERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.3	
	TOT %	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.3	
1<2	PCP	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.1	
	NO PCP	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.1	
	TOT %	.0	.0	.1	.0	.1	*	.0	.0	.0	.0	.2	
2<5	PCP	.1	*	.0	.0	.1	.0	.0	.0	.0	.0	.3	
	NO PCP	.1	.0	.0	.1	.6	.2	.0	.0	.0	.0	1.0	
	TOT %	.2	*	.0	.1	.8	.2	.0	.0	.0	.0	1.3	
5<10	PCP	.0	.0	.0	.0	.5	.1	.1	*	.0	.0	.8	
	NO PCP	.1	.1	.1	.4	8.9	4.8	.3	.1	.0	.6	15.3	
	TOT %	.1	.1	.1	.4	9.4	4.9	.4	.1	.0	.6	16.1	
10+	PCP	.0	.0	.0	.0	.1	.3	.0	.0	.0	.0	.4	
	NO PCP	.9	.4	.4	3.8	48.8	20.8	2.3	.9	.0	3.4	81.7	
	TOT %	.9	.4	.4	3.8	48.9	21.1	2.3	.9	.0	3.4	82.1	
TOT OBS		770											
TOT PCT		1.3	.7	.6	4.2	59.2	26.2	2.7	1.0	.0	4.0	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.2	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.2	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.1	
	11-21	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.1	.0	.1	*	.0	.0	.0	.0	.2	
2<5	0-3	.1	.0	.0	.0	.2	*	.0	.0	.0	.0	.3	
	4-10	.3	*	.0	*	.3	.1	.0	.0	.0	.0	.8	
	11-21	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.4	
	22+	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	
	TOT %	.4	*	.0	*	.8	.3	.0	.0	.0	.0	1.5	
5<10	0-3	*	.1	.1	*	.5	.5	.4	*	.0	1.0	2.7	
	4-10	.2	.0	.0	.3	3.8	2.8	.2	.2	.0	.0	7.6	
	11-21	.0	.0	.0	.1	4.0	2.2	.2	*	.0	.0	6.5	
	22+	.0	.0	.0	.2	2.3	.9	.0	.0	.0	.0	3.5	
	TOT %	.3	.1	.1	.7	10.7	6.3	.8	.3	.0	1.0	20.2	
10+	0-3	.7	.1	.2	.2	2.9	1.5	.6	.2	.0	3.6	9.9	
	4-10	.5	.1	.1	1.7	17.3	10.8	1.7	.7	.0	.0	32.9	
	11-21	.0	.1	.1	1.0	21.6	7.5	.2	*	.0	.0	30.5	
	22+	.0	.0	.0	.2	3.0	1.3	.0	.0	.0	.0	4.5	
	TOT %	1.1	.3	.4	3.1	44.8	21.0	2.3	.9	.0	3.6	77.8	
TOT OBS		1033											
TOT PCT		1.9	.6	.6	3.8	56.3	27.7	3.3	1.2	.0	4.5	100.0	

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1871-1977

NOVEMBER

AREA 0029 COQUIMBO
28.35 72.1W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8) AND
OCCURRENCE OF NH < 5/8 BY HOUR

HR (GMT)	0/0 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	.0	.0	1.2	14.5	21.2	12.1	5.5	.6	1.2	.6	57.0	43.0	165
06009	.7	.0	.7	12.9	25.9	17.0	4.8	.7	.7	.7	62.9	36.1	147
12015	.6	.0	.6	13.5	30.4	21.6	2.9	.6	.6	.6	71.3	28.7	171
18021	.5	.5	.5	14.8	17.6	18.7	3.8	1.1	.5	.5	58.8	41.2	182
TOT	3	1	5	93	157	116	28	5	5	4	417	248	665
PCT	.5	.2	.8	14.0	23.6	17.4	4.2	.8	.8	.6	62.7	37.3	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.4	.9	19.4	79.3	232
06009	.0	.0	.0	1.1	20.9	78.1	278
12015	.0	.4	.4	2.5	18.9	77.8	243
18021	.0	.3	.0	2.1	21.0	76.6	291
TOT	0	2	2	17	210	813	1044
PCT	.0	.2	.2	1.6	20.1	77.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NH > 4/8), BY HOUR

HR (GMT)	<150 <500	<600 <1000	<1000 <5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	.0	1.3	18.4	41.1	40.5	158
06009	.7	1.4	14.6	50.7	34.7	144
12015	.6	1.2	16.6	55.6	27.8	169
18021	.6	1.7	18.4	41.9	39.7	179
TOT	3	9	111	307	232	650
PCT	.5	1.4	17.1	47.2	35.7	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
70/74	.0	.0	.0	.1	.0	.4	.3	.0	6	.9
65/69	.0	.0	.0	.4	1.7	2.0	.9	.0	35	5.0
60/64	.0	.0	.1	.0	4.9	15.4	14.1	2.9	262	37.4
55/59	.0	.0	.0	.0	.4	10.3	33.7	10.9	387	55.3
50/54	.0	.0	.0	.0	.0	.1	.6	.7	10	1.4
TOTAL	0	0	1	4	49	198	347	101	700	100.0
PCT	.0	.0	.1	.6	7.0	28.3	49.6	14.4		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
70/74	.0	.0	.0	.0	.3	.4	.1	.0	.0	.0
65/69	.0	.0	.0	.3	2.9	1.1	.1	.1	.0	.4
60/64	.5	.2	.3	2.0	19.8	10.5	1.4	.9	.0	1.7
55/59	.6	.3	.4	1.1	34.5	14.3	1.1	.2	.0	2.4
50/54	.0	.0	.0	.0	.9	.4	.1	.0	.0	.0
TOTAL	1.1	.8	.7	3.5	58.4	26.8	3.0	1.3	.0	4.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	75	66	64	59	56	54	51	59.6	535
06009	75	64	62	58	55	53	51	58.2	886
12015	77	68	64	59	55	54	50	59.4	526
18021	77	72	68	62	57	56	55	62.5	960
TOT	77	70	66	60	55	54	50	60.1	2907

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.6	4.5	27.8	51.7	15.3	82	176
06009	.0	.0	1.2	24.1	58.2	16.5	84	170
12015	.0	.0	6.1	23.9	52.8	17.2	83	180
18021	.0	2.2	15.2	37.0	36.4	9.2	78	184
TOT	0	5	49	201	352	103	82	710

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1871-1977

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AREA 0029 COQUIMBO
28.5S 72.1W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	65 68	69 72	73 76	77 80	TOT	N FOG	WQ FOG
14/16	.0	.0	.0	.0	.0	.3	.0	.0	2	.0	.3
11/13	.0	.0	.0	.0	.1	.0	.0	.0	1	.0	.1
9/10	.0	.0	.0	.1	1.3	.1	.0	.0	11	.0	1.6
7/8	.0	.0	.1	.4	.6	.1	.1	.0	10	.0	1.4
6	.0	.0	.3	.9	.4	.1	.0	.0	12	.0	1.7
5	.0	.0	.7	.7	1.0	.3	.0	.0	19	.0	2.7
4	.0	.1	.9	2.3	.6	.0	.0	.1	28	.0	4.0
3	.0	.1	3.6	2.6	.0	.0	.0	.0	44	.0	6.3
2	.0	.9	3.0	2.7	.4	.3	.0	.0	51	.3	7.0
1	.0	1.7	6.6	3.9	.3	.0	.0	.0	87	.3	12.2
0	.0	2.7	9.7	3.9	.1	.0	.3	.0	117	.1	16.6
-1	.1	2.6	9.6	3.9	.1	.0	.0	.0	114	.1	16.2
-2	.0	2.0	7.9	1.6	.0	.0	.0	.0	80	.3	11.2
-3	.0	.9	4.9	.6	.1	.0	.0	.0	45	.1	6.3
-4	.0	.6	3.9	.9	.0	.0	.0	.0	37	.0	5.3
-5	.1	.7	1.6	.6	.0	.0	.0	.0	21	.0	3.0
-6	.0	.3	1.1	.0	.0	.0	.0	.0	10	.0	1.4
-7/-8	.0	.1	.4	.0	.0	.0	.0	.0	4	.0	.6
-9/-10	.0	.1	.4	.0	.0	.0	.0	.0	4	.0	.6
-11/-13	.0	.0	.1	.1	.0	.0	.0	.0	2	.0	.3
TOTAL	2	90	383	175	36	9	1	1	699	9	690
PCT	.3	12.9	54.8	23.0	5.2	1.3	.4	.1	100.0	1.3	98.7

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N								NE							
	1-3	4-10	11-21	22-33	34-47	48+	PCT		1-3	4-10	11-21	22-33	34-47	48+	PCT	
<1	.0	.3	.0	.0	.0	.0	.3		.3	.0	.0	.0	.0	.0	.3	
1-2	.0	.3	.0	.0	.0	.0	.3		.0	.0	.0	.0	.0	.0	.0	
3-4	.0	.0	.0	.0	.0	.0	.0		.0	.0	.3	.0	.0	.0	.3	
5-6	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	.5	.0	.0	.0	.0	.5		.3	.0	.3	.0	.0	.0	.5	

HGT	E								SE							
	1-3	4-10	11-21	22-33	34-47	48+	PCT		1-3	4-10	11-21	22-33	34-47	48+	PCT	
<1	.3	.0	.0	.0	.0	.0	.3		.0	.3	.0	.0	.0	.0	.3	
1-2	.0	.3	.0	.0	.0	.0	.3		.0	.7	.0	.0	.0	.0	.7	
3-4	.0	.3	.0	.0	.0	.0	.3		.0	.3	.2	.0	.0	.0	.5	
5-6	.0	.0	.0	.0	.0	.0	.0		.0	.3	.1	.0	.0	.0	.4	
7	.0	.0	.0	.0	.0	.0	.0		.0	.0	.3	.0	.0	.0	.3	
8-9	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.3	.5	.0	.0	.0	.0	.8		.0	1.8	.8	.0	.0	.0	2.4	

PERIOD: (OVER-ALL) 1963-1977

NOVEMBER

AREA 0029 COQUIMBO
28.55 72.1W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							PCT	SW							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	1.2	2.0	.0	.0	.0	.0		3.1	.5	.9	.3	.0	.0	.0		1.6
1-2	1.2	12.6	2.7	.0	.0	.0	16.5		1.2	5.9	1.7	.0	.0	.0		8.7
3-4	.0	7.5	13.2	.5	.0	.0	21.2		.0	3.1	2.0	.0	.0	.0		5.1
5-6	.3	.7	11.1	.9	.0	.0	13.0		.0	.3	2.3	.1	.0	.0		2.7
7	.0	.2	3.6	1.8	.0	.0	3.7		.0	.3	2.3	1.3	.0	.0		4.0
8-9	.0	.0	.3	1.3	.0	.0	1.6		.0	.0	.3	.0	.0	.0		.3
10-11	.0	.0	.0	.8	.0	.0	.8		.0	.0	.3	.0	.0	.0		.3
12	.0	.0	.0	.9	.0	.0	.9		.0	.0	.0	.4	.0	.0		.4
13-16	.0	.0	1.2	.3	.0	.0	1.5		.0	.0	.1	.0	.0	.0		.1
17-19	.0	.0	.2	.0	.0	.0	.2		.0	.0	.1	.0	.0	.0		.1
20-22	.0	.0	.0	.3	.0	.0	.3		.0	.0	.0	.0	.0	.0		.0
23-25	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0
26-32	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0
33-40	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0
41-48	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0
49-60	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0
61-70	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0
71-86	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0
87+	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0
TOT PCT	2.6	22.9	32.4	6.8	.0	.0	64.6		1.6	10.5	9.2	1.8	.0	.0		23.2

HGT	W							PCT	NW							PCT	TOTAL PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+			
<1	.2	.5	.0	.0	.0	.0	.7		.0	.8	.0	.0	.0	.0		.8	
1-2	.0	1.0	.2	.0	.0	.0	1.2		.0	.5	.1	.0	.0	.0		.6	
3-4	.0	.5	.3	.0	.0	.0	.8		.0	.0	.0	.0	.0	.0		.0	
5-6	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
7	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
8-9	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
10-11	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
12	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
13-16	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
17-19	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
20-22	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
23-25	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
26-32	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
33-40	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
41-48	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
49-60	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
61-70	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
71-86	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
87+	.0	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0		.0	
TOT PCT	.2	2.0	.5	.0	.0	.0	2.6		.0	1.4	.1	.0	.0	.0		1.4	96.1

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	6.4	4.6	.3	.0	.0	.0	11.3	
1-2	3.3	21.0	4.6	.0	.0	.0	29.0	
3-4	.0	11.5	13.6	.5	.0	.0	27.7	
5-6	.3	1.3	13.2	1.0	.0	.0	15.9	
7	.0	.5	6.4	3.1	.0	.0	10.0	
8-9	.0	.0	.5	1.3	.0	.0	1.8	
10-11	.0	.0	.3	.8	.0	.0	1.0	
12	.0	.0	.0	1.3	.0	.0	1.3	
13-16	.0	.0	1.3	.3	.0	.0	1.5	
17-19	.0	.0	.3	.0	.0	.0	.3	
20-22	.0	.0	.0	.3	.0	.0	.3	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	10.0	39.0	42.6	8.5	.0	.0	100.0	390

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.8	6.1	7.3	6.5	2.3	.7	.7	.5	1.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	164	4
6-7	.5	1.5	5.3	11.6	7.1	2.2	2.5	1.0	.8	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	197	6
8-9	.0	.8	1.2	4.8	7.3	1.8	1.2	.7	.3	.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	112	7
10-11	.0	.8	1.2	1.7	1.3	2.0	2.7	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	64	7
12-13	.0	.0	.7	.5	.0	.7	1.3	.2	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	22	8
15-19	.0	.0	.0	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	13
INDET	.5	1.2	.3	2.0	1.8	.3	.3	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	40	5
TOTAL	17	63	96	163	120	46	52	18	19	5	3	0	0	0	0	0	0	0	0	602	6
PCT	2.8	10.5	15.9	27.1	19.9	7.6	8.6	3.0	3.2	.8	.5	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

DECEMBER

PERIOD: (PRIMARY) 1909-1976
(OVER-ALL) 1868-1976AREA 0029 COQUIMBO
28.55 71.9W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SNOW	NO SIG WEA
N	.0	.0	6.0	.0	.0	.0	.0	6.0	.0	.0	.0	.0	.0	.0	94.0
NE	.0	.0	2.5	.0	.0	.0	.0	2.5	.0	.0	.0	.0	.0	.0	97.5
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	28.6	.0	.0	71.4
SE	3.1	.0	.0	.0	.0	.0	.0	3.1	.0	.0	.0	.0	.0	.0	96.9
S	.0	.0	1.1	.0	.0	.0	.0	1.1	.2	.0	1.1	.0	.7	.0	96.9
SW	.0	.0	.8	.0	.0	.0	.0	.8	.5	.0	.8	.0	1.4	.0	96.5
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NW	.0	.0	5.6	.0	.0	.0	.0	5.6	.0	.0	.0	.0	.0	.0	94.4
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	5.0	.0	.0	.0	.0	5.0	.0	.0	5.0	.0	.0	.0	90.0
TOT PCT	.1	.0	1.4	.0	.0	.0	.0	1.5	.2	.0	1.1	.1	.7	.0	96.3
TOT OBS:	842														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA								
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG BLWG	DUST SNOW	NO SIG WEA
00003	.0	.0	.5	.0	.0	.0	.0	.5	.0	.0	.0	.0	1.0	.0		98.4
06009	.0	.0	1.7	.0	.0	.0	.0	1.7	.0	.0	1.7	.0	.4	.0		96.1
12015	.5	.0	2.7	.0	.0	.0	.0	3.2	.9	.0	1.4	.0	.9	.0		93.6
18021	.0	.0	1.0	.0	.0	.0	.0	1.0	.0	.0	1.0	.5	.5	.0		97.1
TOT PCT	.1	.0	1.5	.0	.0	.0	.0	1.6	.2	.0	1.1	.1	.7	.0		96.2
TOT OBS:	853															

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	0-3	WIND SPEED (KNOTS)						48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
		4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	1.4	2.0	.3	.2	.0	.0		3.8	6.2	1.7	4.2	2.3	5.3	7.1	5.3	4.0	2.5	
NE	.3	.7	.1	*	.0	.0		1.2	5.2	.5	.0	.3	1.6	2.4	2.6	1.2	1.1	
E	.3	.2	.1	.0	.0	.0		.7	5.7	.1	.0	.3	1.8	1.1	2.6	.6	.3	
SE	1.0	2.9	3.9	.5	*	.0		8.3	11.6	6.5	9.4	7.5	10.4	8.8	2.6	9.4	7.8	
S	4.3	25.5	24.6	4.5	.4	.0		59.3	11.8	63.7	67.7	64.6	55.3	55.1	44.1	56.8	61.2	
SW	1.8	9.1	4.9	.7	*	.0		16.5	9.6	21.1	14.6	14.9	14.5	11.5	32.2	17.9	16.9	
W	1.1	1.2	*	.1	.0	.0		2.4	4.9	1.4	.0	2.4	2.3	2.4	6.6	3.1	2.8	
NW	.9	1.6	.2	*	.0	.0		2.7	5.7	1.5	.0	2.9	2.5	2.7	1.3	3.0	4.1	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	5.1							5.1	.0	3.5	4.2	4.8	6.3	9.0	2.6	4.1	3.3	
TOT OBS	487	1302	1027	180	14	0	3010		10.2	514	24	547	380	500	38	702	305	
TOT PCT	16.2	43.3	34.1	6.0	.5	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)				TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40				00	06	12	18
N	2.7	.9	.1	.1	.0	3.8	6.2	1.8	3.6	7.0	3.5
NE	.9	.2	*	.0	.0	1.2	5.2	.5	.8	2.4	1.1
E	.5	.2	*	.0	.0	.7	5.7	.1	.9	1.2	.5
SE	2.0	4.2	2.1	*	.0	8.3	11.6	6.6	8.7	8.3	8.9
S	14.6	30.0	13.0	1.6	.1	59.3	11.8	63.9	40.8	54.3	58.1
SW	6.0	8.3	2.0	.2	*	16.5	9.6	20.8	14.7	12.9	17.6
W	2.1	.3	*	*	.0	2.4	4.9	1.3	2.4	2.7	3.0
NW	1.9	.7	*	*	.0	2.7	5.7	1.4	2.7	2.6	3.3
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	5.1					5.1	.0	3.5	5.4	8.6	3.9
TOT OBS	1074	1248	525	61	2	3010	10.2	538	927	538	1007
TOT PCT	35.7	44.8	17.4	2.0	.1	100.0		100.0	100.0	100.0	100.0

DECEMBER

PERIOD: (PRIMARY) 1909-1976
(OVER-ALL) 1868-1976AREA 0029 COQUIMBO
28.55 71.9W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47					
00003	3.5	6.9	40.9	40.1	8.0	.6	.0	.0	11.6	100.0	538
06009	5.4	10.6	41.3	34.8	7.6	.3	.0	.0	10.6	100.0	927
12015	8.6	12.5	42.9	31.8	3.9	.4	.0	.0	9.1	100.0	538
18021	3.9	13.0	46.5	31.5	4.6	.6	.0	.0	9.6	100.0	1007
TOT	154	333	1302	1027	180	14	0	10.2			3010
PCT	5.1	11.1	43.3	34.1	6.0	.5	.0		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.3	.2	1.5	1.5		6.5
NE	.3	.2	.2	.4		5.1
E	.0	.0	.2	.0		5.0
SE	.8	.3	1.1	1.8		5.7
S	18.4	5.0	12.6	23.6		5.0
SW	5.6	1.8	5.1	8.2		5.2
W	.7	.1	.8	1.3		5.5
NW	.4	.0	.7	1.2		6.1
VAR	.0	.0	.0	.0		.0
CALM	1.6	.6	.2	3.5		5.4
TOT OBS	176	51	140	261	628	5.2
TOT PCT	28.0	8.1	22.3	41.6	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 169	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.0	.4	.4	.7	.6	.0	.3	.0	.0	1.1	
NE	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0	.6	
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	
SE	.0	.0	.0	.2	.8	.8	.0	.2	.0	.2	2.0	
S	.3	.2	.9	7.4	14.5	6.1	1.9	.5	.1	.2	27.5	
SW	.0	.3	.2	2.9	5.4	2.2	.3	.2	.0	.0	9.1	
W	.0	.0	.0	.3	1.1	.4	.2	.0	.0	.0	1.0	
NW	.0	.0	.2	.0	.9	.0	.2	.0	.0	.0	.9	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.2	.8	1.3	.6	.5	.0	.0	.0	2.5	
TOT OBS	2	3	12	77	157	68	19	6	2	1	281	628
TOT PCT	.3	.5	1.9	12.3	25.0	10.8	3.0	1.0	.3	.2	44.7	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.2	.5	.5	.5	.5	.5	.5	.5
>5000	1.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4
>3500	3.6	4.2	4.2	4.2	4.2	4.2	4.2	4.2
>2000	12.7	14.6	15.3	15.3	15.3	15.3	15.3	15.3
>1000	34.9	39.6	40.6	40.7	40.7	40.7	40.7	40.7
>600	44.5	51.6	52.7	52.8	52.8	52.8	52.8	52.8
>400	45.8	53.3	54.6	54.7	54.7	54.7	54.7	54.7
>150	46.1	53.8	55.0	55.2	55.2	55.2	55.2	55.2
>0	46.1	53.8	55.2	55.3	55.3	55.3	55.3	55.3
TOTAL	293	342	351	352	352	352	353	353

TOTAL NUMBER OF OBS 636

PCT FREQ NH <5/8 44.5

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
	15.1	9.3	8.6	5.3	4.6	4.6	6.6	8.3	37.3	697

PERIOD: (PRIMARY) 1909-1976
(OVER-ALL) 1868-1976

DECEMBER

AREA 0029 COQUIMBO
28.55 71.9W

TABLE 8

		PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF PRECIPITATION WITH VARYING VALUES OF VISIBILITY											TOTAL OBS
VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.9	.6	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.9	.6	.0	.0	.0	.0	.0	
5<10	PCP	.2	*	.0	.1	.4	.1	.0	.1	.0	.2	1.2	15.4
	NO PCP	.4	.6	.3	1.2	8.1	4.1	.1	.1	.0	.6	15.4	
	TOT %	.6	.6	.3	1.3	8.5	4.2	.1	.2	.0	.8	16.6	
10+	PCP	.0	.0	.0	.0	.3	.1	.0	.0	.0	.0	.4	81.1
	NO PCP	2.8	.5	.1	2.6	49.3	16.9	3.1	1.9	.0	3.9	81.1	
	TOT %	2.8	.5	.1	2.6	49.6	16.9	3.1	1.9	.0	3.9	81.5	
TOT OBS													842
TOT PCT		3.5	1.2	.4	3.9	59.2	21.8	3.2	2.1	.0	4.8	100.0	

TABLE 9

		PERCENT FREQ OF WIND DIRECTION VS WIND SPEED WITH VARYING VALUES OF VISIBILITY											TOTAL OBS
VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.1	
	22+	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.1	
	TOT %	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.2	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.1	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	
2<5	0-3	.0	.0	.0	.0	.1	.1	.0	.0	.0	.1	.4	2.2
	4-10	.0	.0	.0	.1	.4	.3	.0	.0	.0	.0	.7	
	11-21	.0	.0	.0	.0	.3	.2	.0	.0	.0	.0	.7	
	22+	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.4	
	TOT %	.0	.0	.0	.1	1.2	.8	.0	.0	.0	.1	2.2	
5<10	0-3	.2	.1	.1	.0	.6	.1	.2	*	.0	.8	2.1	17.1
	4-10	.3	.4	.1	.5	4.0	2.3	.1	.2	.0	.0	7.9	
	11-21	.2	.0	*	.5	4.0	1.6	.0	.1	.0	.0	6.4	
	22+	.0	.0	.0	.0	.6	.2	.0	.0	.0	.0	.7	
	TOT %	.8	.5	.2	1.0	9.1	4.1	.3	.3	.0	.8	17.1	
10+	0-3	.6	*	.1	.1	3.2	1.7	1.0	.4	.0	4.1	11.1	80.5
	4-10	2.1	.6	.0	.7	18.5	8.6	1.5	1.2	.0	.0	33.2	
	11-21	.4	.1	.0	1.3	23.6	5.3	.1	.2	.0	.0	30.9	
	22+	.0	.0	.0	.0	4.5	.6	.2	.0	.0	.0	5.2	
	TOT %	3.1	.7	.1	2.0	49.8	16.2	2.7	1.8	.0	4.1	80.5	
TOT OBS													1106
TOT PCT		3.9	1.3	.3	3.1	60.2	21.1	3.0	2.1	.0	5.0	100.0	

DECEMBER

PERIOD: (PRIMARY) 1909-1976
(OVER-ALL) 1868-1976AREA 0029 COQUIMBO
28.55 71.9W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HR	000	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
(GMT)	149	299	599	999	1999	3499	4999	6499	7999				
00003	.0	.0	.6	12.5	20.6	5.6	2.5	1.3	.6	.0	43.8	56.3	160
06009	1.3	.0	1.3	9.8	28.1	9.8	3.9	1.3	.0	.0	55.6	44.4	153
12015	.0	1.1	4.5	17.5	27.1	16.9	2.8	.0	.0	.0	70.1	29.9	177
18021	.0	.6	.6	7.3	23.2	9.8	2.4	1.2	.6	.6	46.3	53.7	164
TOT	2	3	12	78	162	70	19	6	2	1	355	299	654
PCT	.3	.5	1.8	11.9	24.8	10.7	2.9	.9	.3	.2	54.3	45.7	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL
(GMT)							OBS
00003	.0	.0	.4	1.2	14.5	83.9	242
06009	.6	.0	.0	2.5	17.2	79.6	319
12015	.0	.0	.0	2.7	18.4	78.5	260
18021	.0	.0	.0	2.4	16.4	80.7	296
TOT	2	0	1	25	189	900	1117
PCT	.2	.0	.1	2.2	16.9	80.6	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NH >4/8), BY HOUR

HR	<150 <500D	<600 41	<1000 5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL
(GMT)						OBS
00003	.0	.7	14.4	31.4	54.2	153
06009	1.4	2.7	14.9	41.9	43.2	148
12015	.0	5.7	24.7	46.0	29.3	174
18021	.0	1.2	8.7	38.5	52.8	161
TOT	2	17	101	252	283	636
PCT	.3	2.7	15.9	39.6	44.5	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL	PCT
									OBS	FREQ
75/79	.0	.0	.0	.3	.1	.0	.1	.0	4	.5
70/74	.0	.0	.0	.7	1.3	1.9	.5	.0	33	4.4
65/69	.0	.0	.0	.3	3.5	9.5	4.8	.9	142	18.9
60/64	.0	.0	.0	.0	1.7	20.8	26.7	6.5	418	55.7
55/59	.0	.0	.0	.0	.3	2.8	12.8	4.5	153	20.4
TOTAL	0	0	0	9	52	262	337	90	750	100.0
PCT	.0	.0	.0	1.2	6.9	34.9	44.9	12.0		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.1	.0	.0	.0	.2	.2	.0	.0	.0	.0
.3	.0	.0	.6	2.2	.8	.1	.0	.0	.5
1.4	.2	.1	1.7	9.5	4.1	.6	.7	.0	.7
1.8	.7	.1	2.1	32.9	12.3	1.2	1.4	.0	3.2
.1	.2	.0	.4	14.5	4.2	.4	*	.0	.7
3.7	1.1	.2	4.8	59.3	21.5	2.2	2.1	.0	5.1

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR	MAX	99%	95%	90%	5%	1%	MIN	MEAN	TOTAL
(GMT)									OBS
00003	73	70	67	62	58	56	55	62.1	528
06009	72	68	65	60	56	55	53	60.6	927
12015	74	70	67	62	57	55	53	61.8	534
18021	78	74	71	65	60	57	55	65.2	899
TOT	78	72	69	62	57	55	53	62.5	2888

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL
(GMT)										OBS
00003	.0	.6	2.3	37.9	50.6	8.6	81	174		
06009	.0	1.0	3.3	28.2	50.2	17.2	83	209		
12015	.0	.5	4.2	29.7	49.5	16.1	82	192		
18021	.0	2.7	17.6	43.9	30.5	5.3	76	187		
TOT	0	9	52	264	345	92	81	762		

PERIOD: (PRIMARY) 1909-1976
(OVER-ALL) 1868-1976

DECEMBER

TABLE 17

AREA 0029 COQUIMBO
28.55 71.9W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	77 80	TOT	M FOG	NO FOG
14/16	.0	.0	.0	.0	.0	.0	.3	2	.0	.3
11/13	.0	.0	.0	.0	.4	.3	.0	5	.0	.6
9/10	.0	.1	.4	.6	.6	.4	.0	17	.0	2.2
7/8	.0	.0	.8	.8	.9	.9	.1	22	.1	2.7
6	.0	.0	.8	.3	.4	.3	.0	13	.0	1.7
5	.0	.0	1.2	1.2	.1	.0	.0	19	.0	2.4
4	.0	.9	1.7	1.5	.6	.0	.0	37	.0	4.8
3	.0	.9	2.4	2.2	.4	.0	.0	46	.0	5.9
2	.0	1.8	5.8	2.6	.4	.0	.0	82	.1	10.4
1	.3	2.8	6.2	2.6	.3	.0	.0	94	.1	12.0
0	.9	4.9	10.2	3.5	.1	.0	.0	152	.3	19.3
-1	.4	4.8	5.4	1.5	.0	.0	.0	94	.0	12.1
-2	.1	4.8	6.9	.5	.0	.0	.0	96	.3	12.1
-3	.1	2.8	2.7	.3	.0	.0	.0	46	.0	5.9
-4	.1	1.5	1.4	.4	.0	.0	.0	27	.1	3.3
-5	.0	.8	1.2	.1	.0	.0	.0	16	.0	2.1
-6	.0	.4	.3	.0	.0	.0	.0	5	.0	.6
-7/-8	.0	.3	.0	.0	.0	.0	.0	2	.0	.3
-11/-13	.0	.0	.0	.1	.0	.0	.0	1	.0	.1
-14/-16	.0	.0	.1	.0	.0	.0	.0	1	.0	.1
TOTAL	15	208	368	141	9	3	3	777	8	769
PCT	1.9	26.8	47.4	18.1	4.2	1.2	.4	100.0	1.0	99.0

PERIOD: (OVER-ALL) 1963-1976

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.7	.5	.0	.0	.0	1.2	.0	.1	.0	.0	.0	.0	.1
1-2	.0	.2	.0	.0	.0	.0	.2	.0	.6	.0	.0	.0	.0	.6
3-4	.0	.2	.0	.0	.0	.0	.2	.0	.1	.0	.0	.0	.0	.1
5-6	.0	.0	.5	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.1	1.0	.0	.0	.0	2.1	.0	.7	.0	.0	.0	.0	.7

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.0	.0	.0	.0	.0	.3	.0	.9	.3	.0	.0	.0	1.3
1-2	.0	.3	.0	.0	.0	.0	.3	.0	.3	.0	.0	.0	.0	.5
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.3	2.2	.0	.0	.0	2.5
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.9
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.3	.0	.0	.0	.0	.3	.0	1.8	3.6	.0	.0	.0	5.4

PERIOD: (OVER-ALL) 1963-1976

DECEMBER

AREA 0029 COQUIMBO
28.5S 71.9W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	1.5	1.3	1.2	.0	.0	.0	3.1	.7	1.3	.0	.0	.0	.0	2.2	
1-2	.7	10.0	3.3	.0	.0	.0	14.1	.6	6.8	1.0	.0	.0	.0	8.4	
3-4	.0	6.2	14.6	.3	.0	.0	21.0	.0	1.3	3.4	.0	.0	.0	4.8	
5-6	.0	2.0	9.0	1.1	.0	.0	12.1	.0	.3	2.0	.2	.0	.0	2.8	
7	.0	.2	5.9	1.3	.2	.0	7.5	.0	.1	.5	.3	.1	.0	.9	
8-9	.0	.3	.5	1.3	.0	.0	2.2	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.2	.3	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.5	.8	.5	.0	1.8	.0	.0	.0	.0	.1	.0	.1	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	2.3	20.0	34.2	5.1	.7	.0	62.3	1.3	10.2	6.9	.5	.1	.0	19.1	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.5	.5	.0	.0	.0	.0	.9	.3	.4	.0	.0	.0	.0	.7	
1-2	.2	.6	.0	.0	.0	.0	.8	.3	1.1	.0	.0	.0	.0	1.5	
3-4	.0	.0	.0	.3	.0	.0	.3	.0	.0	.3	.0	.0	.0	.3	
5-6	.0	.2	.0	.0	.0	.0	.2	.0	.0	.1	.0	.0	.0	.1	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.7	1.3	.0	.5	.0	.0	2.5	.6	1.5	.3	.0	.0	.0	2.5	94.9

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT DBS
<1	9.0	5.3	1.1	.0	.0	.0	15.3	
1-2	2.6	19.8	4.2	.0	.0	.0	26.7	
3-4	.0	7.9	20.1	.5	.0	.0	28.6	
5-6	.0	2.6	12.2	1.3	.0	.0	16.1	
7	.0	.3	6.3	1.6	.3	.0	8.5	
8-9	.0	.3	.5	1.3	.0	.0	2.1	
10-11	.0	.0	.2	.3	.0	.0	.5	
12	.0	.0	.5	.8	.3	.0	1.9	
13-16	.0	.0	.0	.3	.0	.0	.3	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	11.6	36.2	43.2	6.1	.8	.0	100.0	378

PERIOD: (OVER-ALL) 1949-1976

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.3	3.6	9.4	5.8	3.0	1.5	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	132	4
6-7	.0	2.3	7.1	9.4	7.2	3.9	1.2	.3	.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	195	6
8-9	.0	.3	2.1	3.9	5.3	2.8	3.5	2.5	.7	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	131	8
10-11	.0	.2	2.0	2.3	1.6	2.0	1.0	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	60	6
12-13	.0	.0	.8	.5	.5	.8	.5	1.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	30	9
>13	.0	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	12
INDET	1.8	.8	1.8	.8	.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	37	3
TOTAL	19	44	141	139	110	70	39	26	16	4	0	0	0	0	0	0	0	0	0	608	6
PCT	3.1	7.2	23.2	22.9	18.1	11.5	6.4	4.3	2.6	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1855-1978

ANNUAL

TABLE 1

AREA 0029 COQUIMBO
28.5S 72.1W

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA						
WIND DIR	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA	
N	.9	.4	3.4	.0	.0	.0	.0	4.6	3.0	.5	3.5	.0	2.7	.0	86.0	
NE	.8	.1	3.1	.0	.0	.0	.0	4.0	.5	.0	3.6	.2	1.8	.0	89.8	
E	.0	1.4	2.6	.0	.0	.0	.0	4.0	3.2	1.7	3.5	2.4	.0	.7	82.6	
SE	.3	.0	.6	.0	.0	.0	.0	1.0	.9	.1	.9	.1	1.5	.0	95.5	
S	.1	*	.9	.0	.0	.0	*	1.0	.5	.2	1.4	*	1.3	.1	95.5	
SW	.3	*	1.1	.0	.0	.0	.0	1.5	.6	.1	1.9	*	1.7	.1	94.1	
W	.9	.5	2.5	.0	.0	.0	.0	3.4	2.3	.9	3.0	.0	.8	.0	89.7	
NW	1.6	.2	1.9	.0	.0	.0	.0	3.4	2.0	.2	1.9	.0	.7	.0	91.8	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.3	.2	1.5	.0	.0	.0	.0	1.7	.9	.2	1.6	.2	2.5	.0	93.0	
TOT PCT	.3	.1	1.2	.0	.0	.0	*	1.6	.9	.2	1.6	.1	1.4	.1	94.2	
TOT OBS:	9635															

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00603	.4	.2	.5	.0	.0	.0	.0	1.0	.6	.2	1.2	.1	1.4	.0	95.5
06609	.4	.1	1.5	.0	.0	.0	.0	1.8	.6	.6	1.4	.0	.8	*	94.7
12615	.6	.2	1.8	.0	.0	.0	.0	2.4	1.7	.1	2.3	*	1.3	*	92.1
18621	.2	*	1.0	.0	.0	.0	*	1.2	.5	*	1.9	.1	2.0	.1	94.1
TOT PCT	.4	.1	1.2	.0	.0	.0	*	1.6	.9	.2	1.7	.1	1.4	.1	94.1
TOT OBS:	9826														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)						48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00					03	06	09	12	15	18	21
N	1.5	3.2	1.1	.3	*	*	6.2	7.0	4.5	6.1	5.1	7.0	7.2	6.3	7.2	5.5	
NE	.7	1.2	.3	*	*	*	2.2	3.9	1.6	1.3	1.7	2.3	3.3	4.0	2.6	1.5	
E	.6	.9	.2	.1	*	.0	1.6	6.3	1.2	.6	1.1	2.3	2.5	1.9	1.7	1.1	
SE	1.1	4.1	3.9	1.2	.1	.0	10.4	12.0	8.7	9.5	10.0	12.3	11.6	6.3	10.5	9.9	
S	4.2	21.2	21.7	5.3	.4	*	52.9	12.3	56.9	57.0	56.6	51.2	51.6	54.6	48.9	53.4	
SW	1.8	7.5	4.1	.7	*	.0	14.2	9.7	16.5	15.3	13.8	11.9	11.6	15.1	15.0	15.4	
W	.9	1.6	.2	*	*	.0	2.8	5.8	2.3	1.5	2.2	2.3	2.3	5.1	3.6	3.7	
NW	1.1	2.2	.4	.1	*	.0	4.0	6.5	3.1	2.0	3.5	3.9	3.2	2.9	5.4	4.7	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	5.7						5.7	.0	5.2	6.6	6.0	6.8	6.6	3.8	5.1	4.9	
TOT OBS							38724	10.3	6567	233	6591	4724	6503	332	9700	4074	
TOT PCT	17.5	42.0	32.2	7.7	.6	*		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	3.4	2.2	.5	.1	*		6.2	7.0	4.5	5.9	7.2	6.7	
NE	1.5	.7	.1	*	*		2.2	3.9	1.5	2.0	3.4	2.3	
E	1.1	.4	.1	*	.0		1.6	6.3	1.2	1.6	2.5	1.5	
SE	2.9	4.5	2.6	.4	*		10.4	12.0	8.7	11.0	11.4	10.4	
S	13.1	25.2	12.7	1.7	.1		52.9	12.3	56.9	54.3	51.6	50.2	
SW	5.5	6.6	1.9	.2	*		14.2	9.7	16.5	13.0	11.8	15.1	
W	2.0	.7	.1	*	*		2.8	5.8	2.3	2.2	2.5	3.6	
NW	2.4	1.4	.2	*	*		4.0	6.5	3.1	3.6	3.2	5.2	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	5.7						5.7	.0	5.3	6.3	6.5	5.0	
TOT OBS							38724	10.3	6800	11315	6835	13774	
TOT PCT	37.6	41.6	18.1	2.5	.1			100.0	100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1855-1978

ANNUAL

AREA 0029 COQUIMBO
28.55 72.1W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)										
HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-23	34-47				
00003	5.3	9.5	40.4	35.3	8.8	.8	*	11.0	100.0	6800
06009	6.3	11.0	40.9	33.0	8.2	.5	*	10.4	100.0	11315
12015	6.5	13.2	42.6	30.2	6.9	.6	*	9.8	100.0	6835
18071	5.0	13.0	43.4	30.8	7.1	.6	*	10.0	100.0	13774
TOT								10.3		38724
PCT	5.7	11.8	42.0	32.2	7.7	.6	*	10.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	.8	.3	1.0	2.5	6.1	5.7
NE	.4	.2	.4	1.1	5.7	5.7
E	.2	.1	.3	.5	6.1	5.7
SE	.8	.6	1.6	2.1	5.1	5.1
S	16.9	6.8	14.1	23.0	5.1	5.1
SW	4.6	1.8	3.5	7.1	5.1	5.1
W	.5	.3	.5	1.1	5.7	5.7
NW	.5	.2	.5	1.0	5.5	5.5
VAR	.0	.0	.0	.0	5.7	5.7
CALM	1.1	.4	.8	2.6	5.2	5.2
TOT OBS					7617	
TOT PCT	25.6	10.7	22.6	41.1	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NM >4/8)
AND OCCURRENCE OF NM <5/8 BY WIND DIRECTION

000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH ANY	<5/8 HGT	TOTAL OBS
*	*	.1	.5	1.5	.6	.1	.1	*	.1		1.5	
*	*	.1	.3	.7	.1	*	*	*	*		.8	
*	*	.0	.1	.2	.1	.1	*	*	.0		.3	
*	*	.1	.5	1.5	.8	.2	*	*	*		1.8	
.3	.1	1.1	6.8	15.1	7.1	2.2	.6	.1	.3		27.2	
.1	.1	.3	1.8	4.3	2.0	.5	.1	.1	.1		7.7	
*	*	.1	.3	.6	.3	*	*	*	.1		1.0	
*	.0	.1	.2	.6	.3	.1	*	*	*		.9	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		.0	
*	.0	.1	.4	1.3	.6	.2	.1	*	.1		1.9	
.5	.3	2.0	11.1	25.8	12.0	3.5	.9	.2	.7		43.1	7617 100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NM >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= NR >6500	.7	.9	1.0	1.0	1.0	1.0	1.0	1.0
= NR >5000	1.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8
= NR >3500	4.3	5.2	5.3	5.3	5.3	5.3	5.3	5.3
= NR >2000	14.2	17.0	17.2	17.2	17.3	17.3	17.3	17.3
= NR >1000	35.5	42.3	43.0	43.0	43.0	43.0	43.0	43.0
= NR >600	43.8	53.0	54.0	54.0	54.1	54.1	54.1	54.1
= NR >300	44.9	54.8	55.9	56.0	56.0	56.0	56.0	56.0
= NR >150	45.0	55.0	56.2	56.3	56.3	56.3	56.3	56.3
= NR >0	45.2	55.3	56.6	56.7	56.8	56.8	56.8	56.8

TOTAL NUMBER OF OBS: 7739

PCT FREQ NM <5/8: 43.2

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
13.6	9.0	7.9	6.6	5.1	4.1	7.4	9.7	36.1	.3	8254

PERIOD: (PRIMARY) 1908-1978
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	.0	.2
	TOT %	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	.0	.2
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	.0	.2
	TOT %	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	.0	.2
1<2	PCP	.0	.0	.0	.0	*	*	.0	*	.0	*	*	
	NO PCP	.1	*	*	*	*	*	*	*	.0	*	.2	
	TOT %	.1	*	*	*	.1	*	*	*	.0	*	.2	
2<5	PCP	.1	*	.0	*	.1	.1	.0	*	.0	*	.3	
	NO PCP	.2	*	*	.1	.6	.3	*	*	.0	.1	1.3	
	TOT %	.3	*	*	.1	.7	.3	*	*	.0	.1	1.6	
5<10	PCP	.1	.1	.0	*	.3	.1	.1	.1	.0	*	.8	
	NO PCP	1.1	.6	.2	.8	3.9	3.0	.5	.4	.0	.8	16.3	
	TOT %	1.2	.6	.2	.8	9.3	3.1	.6	.5	.0	.8	17.1	
10+	PCP	.1	*	*	.0	.2	.1	*	*	.0	*	.4	
	NO PCP	3.5	1.5	.7	4.0	49.7	13.8	1.8	1.8	.0	3.4	80.3	
	TOT %	3.6	1.5	.7	4.0	49.9	13.9	1.8	1.8	.0	3.4	80.7	
TOT OBS		5.1	2.2	1.0	5.0	60.1	17.4	2.5	2.4	.0	4.3	100.0	9622
TOT PCT													

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	*	.0	.0	*	.0	*	.0	.0	.1	.1	
	4-10	*	*	*	.0	*	*	.0	*	.0	*	.1	
	11-21	.0	.0	.0	.0	*	*	.0	.0	.0	*	.1	
	22+	.0	.0	.0	.0	*	*	.0	.0	.0	*	*	
	TOT %	*	*	*	.0	.1	*	*	*	.0	.1	.2	
1/2<1	0-3	*	.0	.0	.0	*	*	.0	*	.0	*	*	
	4-10	*	.0	*	*	*	*	.0	.0	.0	*	.1	
	11-21	.0	.0	.0	.0	*	*	.0	.0	.0	*	*	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	.0	
	TOT %	*	.0	.0	*	.1	*	*	*	.0	*	.2	
1<2	0-3	*	.0	.0	*	*	.0	*	*	.0	*	.1	
	4-10	*	*	*	*	.1	*	*	*	.0	*	.2	
	11-21	*	.0	.0	*	*	*	.0	.0	.0	*	.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	.0	
	TOT %	.1	*	*	*	.1	*	*	*	.0	*	.3	
2<5	0-3	.1	*	*	*	.1	.1	*	*	.0	.2	.5	
	4-10	.1	*	*	.1	.4	.3	*	*	.0	1.0	.5	
	11-21	.1	*	*	*	.3	.1	.0	.0	.0	.1	.5	
	22+	*	.0	.0	*	.1	*	.0	.0	.0	.1	.1	
	TOT %	.3	*	*	.1	.9	.5	.1	*	.0	.2	2.2	
5<10	0-3	.2	.1	.1	.1	.7	.4	.2	.1	.0	1.2	3.1	
	4-10	.7	.3	.1	.4	3.9	1.9	.3	.3	.0	7.9	7.9	
	11-21	.4	.1	*	.2	4.0	1.2	.1	.1	.0	6.0	6.0	
	22+	.1	*	.0	.1	1.1	.2	.0	*	.0	1.4	1.4	
	TOT %	1.3	.5	.2	.8	9.7	3.6	.6	.5	.0	1.2	18.4	
10+	0-3	.6	.2	.2	.3	2.4	1.1	.4	.4	.0	4.2	9.8	
	4-10	2.3	1.1	.5	1.8	17.5	7.5	1.3	1.1	.0	33.0	33.0	
	11-21	.7	.3	.1	1.3	21.9	4.9	.2	.2	.0	29.5	29.5	
	22+	.1	*	*	.1	5.3	.8	*	*	.0	6.3	6.3	
	TOT %	3.6	1.6	.7	3.5	47.1	14.3	1.9	1.7	.0	4.2	78.6	
TOT OBS		5.3	2.2	1.0	4.5	58.0	18.5	2.5	2.3	.0	5.7	100.0	12786
TOT PCT													

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY MGT	TOTAL OBS
00003	.3	.3	1.6	10.4	22.1	9.2	2.8	.8	.4	.4	48.3	51.7	1973
06009	.7	.1	1.5	9.4	24.9	11.3	3.5	1.0	.1	.7	53.3	46.7	1752
12015	.5	.5	3.0	13.2	31.4	14.4	3.7	.7	.2	.7	68.3	31.7	2089
18021	.5	.3	1.6	9.9	22.4	12.0	3.5	.9	.2	1.0	52.2	47.8	2089
TOT													7903
PCT	.5	.3	1.9	10.8	25.3	11.8	3.4	.8	.2	.7	55.8	44.2	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.2	*	.3	1.6	16.7	81.2	2951
06009	.4	.2	.4	2.1	18.9	78.0	3448
12015	.3	.5	.3	2.9	18.9	77.2	3064
18021	.1	.1	.3	2.3	19.0	78.1	3517
TOT							12980
PCT	.2	.2	.3	2.2	18.4	78.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOURL (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.3	2.2	13.6	36.0	50.4	1928
06009	.7	2.5	13.1	41.9	45.0	1708
12015	.5	4.3	18.7	50.5	30.7	2063
18021	.5	2.4	13.5	40.3	46.2	2040
TOT						7739
PCT	.5	2.9	14.8	42.3	42.8	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
80/84	.0	.0	.0	*	.0	.0	.0	.0	*	*
75/79	.0	.0	.0	.1	.1	.1	*	.0	.3	.3
70/74	.0	.0	.0	.2	.9	1.0	.3	.1	2.5	2.5
65/69	.0	.0	.0	.2	2.4	5.5	5.3	1.7	15.0	15.0
60/64	.0	.0	*	.3	2.8	11.2	14.7	4.9	33.9	33.9
55/59	.0	.0	*	.2	2.0	10.5	20.6	7.6	41.0	41.0
50/54	.0	.0	.0	.0	.5	1.0	3.6	2.1	7.2	7.2
45/49	.0	.0	.0	.0	.0	.0	*	*	*	*
TOT									8672	100.0
PCT	.0	.0	*	1.0	8.6	29.4	44.6	16.4		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
80/84	.0	.0	.0	.0	*	*	.0	.0	.0	.0
75/79	.0	.0	.0	.0	.1	.1	.0	*	.0	.0
70/74	*	.1	*	.2	1.3	.5	.2	*	.0	.1
65/69	.6	.2	.1	1.2	8.7	2.7	.5	.4	.0	.7
60/64	1.6	.7	.3	1.7	19.9	6.3	.8	.9	.0	1.7
55/59	2.5	1.1	.4	1.8	25.1	6.5	.7	.9	.0	2.1
50/54	.4	.2	.1	.3	4.7	1.0	.2	.1	.0	.2
45/49	.0	.0	.0	.0	*	.0	.0	.0	.0	.0
TOT	5.2	2.2	1.0	5.2	59.9	17.1	2.4	2.3	.0	4.8

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	81	67	65	60	56	54	49	59.8	6798
06009	80	65	63	59	55	53	46	58.6	11364
12015	77	67	64	60	55	53	47	59.4	6782
18021	84	72	68	62	57	55	49	62.1	12632
TOT	84	70	66	60	56	54	46	60.1	37576

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.6	5.5	29.3	48.1	16.5	82	2214		
06009	.0	.6	5.5	24.8	49.1	20.0	83	2129		
12015	.0	.5	7.2	26.8	45.6	20.0	83	2265		
18021	.0	2.4	15.7	36.3	35.6	10.0	78	2277		
TOT	0	92	758	2609	3955	1471	82	8885		

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	45 48	49 52	53 56	57 60	61 64	65 68	69 72	73 76	77 80	81 84	TOT	N FOG	NO FOG
17/18	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.0	*
14/1A	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	10	.0	.1
11/13	.0	.0	.0	.0	.1	.2	.2	.1	.0	.0	53	*	.6
9/10	.0	.0	.0	.1	.3	.3	.3	.1	.0	.0	93	*	1.0
7/8	.0	.0	.1	.1	.3	.3	.3	.1	.0	.0	143	*	1.6
6	.0	.0	.0	.2	.5	.4	.2	.0	.0	.0	126	.0	1.4
5	.0	.0	.1	.5	.9	.5	.2	.1	.0	.0	208	*	2.3
4	.0	.0	.2	1.2	1.3	.7	.2	.0	.0	.0	233	.1	3.7
3	.0	.0	.3	1.8	1.4	.9	.4	.1	.0	.0	441	*	4.9
2	.0	.0	.8	2.8	2.7	1.4	.4	.1	.0	.0	734	.1	8.1
1	.0	.0	1.9	3.5	2.9	1.6	.4	.1	.0	.0	918	.2	10.1
0	.0	.1	3.7	5.9	4.3	2.2	.3	.0	.0	.0	1492	.3	16.5
-1	.0	.1	3.7	5.2	3.8	1.8	.3	.0	.0	.0	1318	.2	14.7
-2	.0	.2	3.2	4.4	3.4	1.4	.2	.0	.0	.0	1138	.2	12.6
-3	.0	.2	2.6	3.1	2.0	.8	.0	.0	.0	.0	766	.2	8.5
-4	.0	.4	1.7	2.0	1.5	.4	.0	.0	.0	.0	531	.1	5.9
-5	.0	.2	1.2	1.1	.9	.2	.0	.0	.0	.0	314	.1	3.5
-6	.0	.1	.3	.3	.3	.1	.0	.0	.0	.0	116	.1	1.2
-7/-8	.0	.1	.4	.5	.2	.1	.0	.0	.0	.0	109	*	1.2
-9/-10	.0	.1	.1	.1	.0	.0	.0	.0	.0	.0	31	.0	.3
-11/-12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	.0	.1
-13/-14	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	.0	.0
-15/-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.0	.0
TOTAL											5891		
PCT	* 1.5	20.5	32.9	27.2	13.7	3.4	.7	.2	*		100.0	1.7	98.3

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	N 22-33	34-47	48+	PCT	1-3	4-10	11-21	NE 22-33	34-47	48+	PCT
<1	.2	.5	*	.0	.0	.0	.7	.2	.2	.0	.0	.0	.0	.4
1-2	.2	1.8	.4	.0	.0	.0	2.5	.1	.8	.1	.0	.0	.0	.9
3-4	*	.5	.5	.0	.0	.0	1.1	.0	.2	.1	.0	.0	.0	.3
5-6	.0	.1	.2	.0	.0	.0	.3	.0	.0	.1	.0	.0	.0	.1
7	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
8-9	.0	*	*	.0	.0	.0	.1	.0	*	*	.0	.0	.0	*
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	*	.0	*	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	*	.0	.0	*	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	3.0	1.3	.1	*	.0	4.9	.2	1.2	.4	*	.0	.0	1.9

HGT	1-3	4-10	11-21	E 22-33	34-47	48+	PCT	1-3	4-10	11-21	SE 22-33	34-47	48+	PCT
<1	.1	*	*	.0	.0	.0	.1	.2	.6	*	.0	.0	.0	.9
1-2	.1	.2	.1	.0	.0	.0	.4	.1	1.1	.2	.0	.0	.0	1.5
3-4	.0	.1	.0	.0	.0	.0	.1	.0	.4	.8	.1	.0	.0	1.3
5-6	.0	.0	.0	.0	.0	.0	.0	*	.1	.6	*	.0	.0	.8
7	.0	.0	.0	.0	.0	.0	.0	.0	*	.4	*	.0	.0	.4
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	.1	.0	.0	.1
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	.1	*	.0	.1
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.2	.4	.1	.0	.0	.0	.6	.3	2.3	2.1	.3	*	.0	5.1

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TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	1.1	2.7	.1	.0	.0	.0	3.9	.4	1.1	.0	.0	.0	.0	1.5
1-2	1.0	10.2	4.2	.0	.0	.0	15.2	.4	4.4	1.0	.0	.0	.0	5.9
3-4	.1	5.3	11.9	.8	.0	.0	18.2	.1	1.8	1.8	.1	.0	.0	3.8
5-6	.1	1.4	9.6	1.7	.0	.0	12.8	.1	.6	1.7	.1	.0	.0	2.4
7	.0	.2	4.5	2.0	.1	.0	6.8	.0	.2	.8	.2	.0	.0	1.3
8-9	.0	.2	1.4	1.7	.1	.0	3.4	.0	.0	.2	.2	.0	.0	.4
10-11	.0	.0	.4	1.1	.0	.0	1.6	.0	.0	.1	.2	.0	.0	.3
12	.0	.0	.2	.3	.1	.0	.5	.0	.0	.0	.1	.0	.0	.1
13-16	.0	.0	.1	.3	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.1	.1	.0	.2	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	2.3	20.0	32.3	8.1	.5	.0	63.3	.9	8.1	5.7	.9	.0	.0	15.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.2	.3	.0	.0	.0	.0	.5	.2	.3	.0	.0	.0	.0	.5	
1-2	.1	.9	.1	.0	.0	.0	1.1	.1	.7	.1	.0	.0	.0	.9	
3-4	.0	.2	.0	.0	.0	.0	.3	.0	.2	.1	.0	.0	.0	.4	
5-6	.0	.1	.1	.0	.0	.0	.2	.0	.1	.0	.0	.0	.0	.1	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.3	1.5	.3	.0	.0	.0	2.1	.4	1.2	.4	.0	.0	.0	2.0	95.5

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	7.9	5.7	.3	.0	.0	.0	13.8	
1-2	2.5	19.9	6.1	.0	.0	.0	28.5	
3-4	.2	8.6	15.2	1.1	.0	.0	25.1	
5-6	.1	2.3	12.1	1.8	.0	.0	16.4	
7	.1	.4	5.8	2.2	.1	.0	8.6	
8-9	.0	.2	1.7	2.0	.1	.0	4.0	
10-11	.0	.0	.5	1.4	.1	.0	2.0	
12	.0	.0	.2	.3	.1	.0	.6	
13-16	.0	.0	.0	.1	.3	.0	.5	
17-19	.0	.0	.0	.1	.1	.0	.3	
20-22	.0	.0	.0	.1	.0	.0	.1	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	10.9	37.3	42.0	9.4	.6	.0	100.0	4149

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.8	6.1	8.4	5.3	2.5	1.1	.8	.2	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1828	4
6-7	.1	1.5	5.6	9.8	6.3	3.0	2.0	.7	.6	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	2066	6
8-9	.0	.4	1.8	4.5	5.0	3.4	2.5	1.1	1.3	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	1401	7
10-11	.0	.5	1.1	1.6	1.9	1.9	1.3	.6	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	661	7
12-13	.0	.0	.7	.6	.7	.6	.7	.4	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	276	8
>13	.0	.0	.0	.3	.4	.3	.2	.1	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	114	9
INDET	1.8	1.0	1.4	1.2	1.2	.6	.6	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	551	4
TOTAL																				6897	6
PCT	3.7	9.5	19.0	23.4	17.9	10.9	8.0	3.2	3.3	.7	.2	.0	.1	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1855-1978

TABLE 20

AREA 0029 COQUIMBO
28.55 72.1W

PERCENT FREQUENCY OF OCCURRENCE OF SEA TEMP (DEG F) BY MONTH														
SEA TMP DEG F	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	PCT
96+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
95/96	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
93/94	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
91/92	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
89/90	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
87/88	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
85/86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
83/84	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
81/82	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
79/80	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	*
77/78	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	10	*
75/76	.1	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	*
73/74	.6	.8	.9	.2	.0	.0	.0	.0	.0	.0	.0	.0	57	.2
71/72	2.2	2.5	2.0	.3	.1	.0	.0	.0	.0	.0	.0	.0	1	.1
69/70	5.2	9.8	5.0	1.2	.3	.0	.0	.0	.0	.0	.0	.0	2	.8
67/68	12.6	19.7	17.2	7.0	1.0	.4	.1	.0	.0	.0	.0	.0	2.8	1760 4.7
65/66	21.2	22.0	22.3	13.3	5.2	1.5	.1	.1	.1	.2	2.0	9.6	2797	7.5
63/64	29.2	21.8	22.6	22.7	10.5	7.3	1.9	.9	.6	1.9	10.9	26.7	4716	12.7
61/62	14.9	12.4	12.8	20.3	23.5	16.8	10.5	4.4	3.7	8.9	19.6	26.3	5205	14.0
59/60	9.3	6.9	9.6	17.2	22.6	25.6	23.9	14.3	14.8	24.6	28.2	18.1	6746	18.1
57/58	3.4	2.8	4.5	10.9	16.6	25.0	30.0	29.7	31.5	31.4	22.2	10.0	7130	19.1
55/56	.8	.9	2.7	3.4	10.3	17.0	23.6	33.4	34.1	26.5	12.2	4.5	5730	15.4
53/54	.3	.1	.5	1.2	3.0	5.4	8.4	13.7	13.4	5.7	3.2	.8	1880	5.0
51/52	.2	.0	.2	.0	.6	.7	1.5	2.8	1.7	.7	.3	.1	297	.8
49/50	.0	.0	.0	.0	.2	.2	.5	.2	.5	.1	.0	.0	49	.1
47/48	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	7	*
45/46	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	4	*
43/44	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
41/42	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
39/40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
37/38	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
35/36	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
33/34	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
31/32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
29/30	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
27/28	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
<27	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
TOTAL	2867	2569	3199	2738	2826	3100	3654	3386	3606	3514	2871	2917	37247	100.0
MEAN	64.0	64.8	63.9	61.8	60.0	58.6	57.5	56.5	56.6	57.6	59.4	61.5	60.1	

TABLE 21

PRESSURE (MB)

AVERAGE BY HOUR (GMT)

MO	0000	0300	0600	0900	1200	1500	1800	2100	MEAN	TOTAL OBS
JAN	1014	1013	1014	1013	1015	1014	1015	1013	1014	1514
FEB	1013	1014	1014	1013	1015	1014	1015	1013	1014	1359
MAR	1014	1015	1014	1014	1015	1013	1016	1014	1015	1663
APR	1015	1015	1015	1015	1016	1016	1017	1013	1016	1528
MAY	1016	1015	1016	1016	1017	1015	1017	1016	1016	1410
JUN	1017	1017	1016	1017	1018	1018	1018	1017	1017	1816
JUL	1018	1017	1018	1017	1019	1017	1018	1018	1018	2083
AUG	1018	1018	1018	1017	1018	1018	1019	1017	1018	1830
SEP	1018	1017	1016	1018	1019	1018	1019	1018	1018	1893
OCT	1017	1017	1017	1016	1018	1019	1018	1017	1017	1746
NOV	1016	1017	1016	1016	1017	1018	1017	1017	1017	1414
DEC	1015	1015	1014	1014	1016	1014	1016	1014	1015	1374
ANN	1016	1016	1016	1016	1017	1016	1017	1016	1016	19830
OBS	3517	236	3386	1535	3564	329	3830	1413	.0	

PERCENTILES

MO	MIN	1%	5%	25%	50%	75%	95%	99%	MAX
JAN	1005	1008	1010	1013	1014	1016	1018	1021	1028
FEB	1006	1008	1011	1013	1014	1016	1018	1020	1026
MAR	1008	1009	1011	1013	1015	1016	1019	1021	1026
APR	1009	1010	1012	1014	1016	1017	1019	1022	1026
MAY	1005	1009	1012	1015	1016	1018	1020	1022	1029
JUN	1006	1010	1012	1015	1017	1019	1023	1026	1030
JUL	1005	1010	1013	1016	1018	1020	1024	1026	1032
AUG	1008	1010	1012	1016	1018	1020	1024	1026	1028
SEP	1006	1011	1013	1016	1018	1020	1024	1027	1030
OCT	1008	1010	1013	1016	1017	1019	1022	1024	1030
NOV	1008	1011	1012	1015	1017	1019	1022	1023	1025
DEC	1005	1008	1011	1013	1015	1017	1019	1021	1024

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1870-1978

JANUARY

AREA 0030 ANTOFAGASTA
22.15 71.7W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHMR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG MD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.2	.0	.0	.0	91.8
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
E	.0	.0	7.5	.0	.0	.0	.0	7.5	.0	.0	.0	.0	.0	.0	92.5
SE	.1	.0	.1	.0	.0	.0	.0	.3	.7	.0	.0	.0	.0	.0	99.0
S	.1	.0	.1	.0	.0	.0	.0	.2	.7	.3	.1	.0	.3	.0	98.3
SW	.0	.0	.9	.0	.0	.0	.0	.9	.2	.0	.7	.0	1.1	.0	97.2
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.0	1.5	.0	97.0
TOT PCT	.1	.0	.3	.0	.0	.0	.0	.3	.6	.2	.3	.0	.4	.0	98.1
TOT OBS:	1189														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	BLWG DUST BLWG SNOW	NO SIG WEA
00603	.4	.0	.4	.0	.0	.0	.0	.7	.4	.0	.4	.0	.0	.0	98.6
06009	.0	.0	.3	.0	.0	.0	.0	.3	.9	.9	.6	.0	.6	.0	96.8
12115	.0	.0	.3	.0	.0	.0	.0	.3	.7	.0	.3	.0	.3	.0	98.3
18121	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.7	.0	99.0
TOT PCT TOT OBS:	.1 1224	.0	.2	.0	.0	.0	.0	.3	.6	.2	.3	.0	.4	.0	98.1

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21	
N	1.1	.8	*	.0	.0	.0		2.0	3.9		1.0	.0	3.2	5.0	1.7	5.3	.7	.8
NE	.5	.8	.1	*	.0	.0		1.4	3.2		.3	.0	2.1	3.0	2.3	.8	.7	.0
E	.9	1.7	.1	*	.0	.0		2.4	5.4		1.4	.0	2.8	5.5	2.6	.0	1.7	.6
SE	3.2	11.5	2.9	*	.0	.0		17.7	7.2		11.6	22.4	15.7	19.9	21.0	25.8	19.8	16.9
S	9.7	34.3	9.7	.2	.0	.0		53.9	7.3		63.0	58.6	50.4	40.3	51.4	51.5	56.6	60.5
SW	3.1	7.1	1.1	*	.0	.0		11.3	5.9		12.7	15.3	10.7	6.7	8.4	12.1	13.5	15.3
W	.7	.8	*	.0	.0	.0		1.5	4.3		2.0	.0	1.7	2.0	1.1	1.5	1.1	1.1
NW	.5	.6	.0	.0	.0	.0		1.1	3.9		1.0	.0	1.8	1.2	1.2	.0	.7	.9
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	8.8							8.8	.0		6.9	3.4	11.6	16.4	10.3	3.0	5.3	4.0
TOT OBS	1444	2490	710	11	0	0	5055		6.3		822	29	933	684	741	33	1360	453
TOT PCT	28.6	57.2	14.0	.2	.0	.0			100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	1.7	.3	*	.0	.0		2.0	3.9	1.0	4.0	1.8	.7	
NE	1.1	.2	*	.0	.0		1.4	3.2	.3	2.3	2.3	.5	
E	1.6	.8	*	.0	.0		2.4	5.4	1.3	3.9	2.5	1.4	
SE	8.9	8.4	.4	.0	.0		17.7	7.2	12.0	17.5	21.2	19.1	
S	27.0	25.2	1.6	.0	.0		53.9	7.3	62.9	46.1	51.4	57.6	
SW	7.7	3.4	.2	*	.0		11.3	5.9	12.8	9.0	8.6	13.9	
W	1.3	.2	.0	.0	.0		1.5	4.3	1.9	1.8	1.1	1.1	
NW	1.0	.1	.0	.0	.0		1.1	3.9	1.0	1.6	1.2	.7	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	8.8						8.8	.0	6.8	13.6	9.9	5.0	
TOT OBS	2992	1950	112	1	0	5055		6.3	851	1617	774	1813	
TOT PCT	59.2	38.6	2.2	*	.0		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1870-1978

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47					
0000Z	6.8	12.7	59.9	20.3	.2	.0	.0	.0	7.3	100.0	851
0600Z	13.6	24.8	52.0	9.5	.1	.0	.0	.0	5.2	100.0	1617
1200Z	9.9	23.5	53.5	12.8	.3	.0	.0	.0	5.9	100.0	774
1800Z	5.0	17.0	62.1	15.7	.3	.0	.0	.0	6.9	100.0	1813
TOT	44.5	99.9	289.0	71.0	.1	.0	.0	.0	6.3		3055
PCT	8.8	19.8	57.2	14.0	.2	.0	.0	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & Obscd	TOTAL Obs	MEAN CLOUD COVER
N	.0	.1	.1	.3		6.6
NE	.3	.0	.0	.4		4.8
E	.1	.2	.3	.3		5.7
SE	1.9	1.9	5.6	4.9		5.8
S	13.4	8.7	19.1	24.9		5.5
SW	2.4	1.5	2.7	4.9		5.5
W	.1	.2	.3	.0		4.0
NW	.1	.0	.0	.4		6.1
VAR	.0	.0	.0	.0		.0
CALM	1.5	.6	1.5	1.3		4.6
TOT OBS	177	118	263	333	891	5.5
TOT PCT	19.9	13.2	29.5	37.4	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL Obs
N	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.2	
NE	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.4	
E	.0	.0	.1	.0	.2	.2	.0	.0	.0	.0	.4	
SE	.0	.0	.1	.4	4.0	2.9	1.2	.1	.0	.4	5.2	
S	.0	.1	.8	5.4	17.7	10.4	2.3	.9	.5	.3	27.7	
SW	.0	.0	.0	2.0	3.2	1.1	.3	.1	.3	.0	4.7	
W	.0	.0	.0	.1	.1	.1	.0	.0	.0	.0	.3	
NW	.0	.0	.0	.2	.0	.1	.0	.0	.0	.0	.1	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.2	.3	.8	.4	.1	.1	.0	.2	2.6	
TOT OBS	0	1	10	75	235	137	35	11	7	8	372	891
TOT PCT	.0	.1	1.1	8.4	26.4	15.4	3.9	1.2	.8	.9	41.8	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7
= OR >5000	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9
= OR >3500	6.1	6.8	6.8	6.8	6.8	6.8	6.8	6.8
= OR >2000	20.1	22.4	22.4	22.4	22.4	22.4	22.4	22.4
= OR >1000	45.8	48.6	48.6	48.6	48.6	48.6	48.6	48.6
= OR >600	53.7	57.0	57.0	57.0	57.0	57.0	57.0	57.0
= OR >300	54.6	58.0	58.0	58.0	58.0	58.0	58.0	58.0
= OR >150	54.7	58.1	58.1	58.1	58.1	58.1	58.1	58.1
= OR >0	54.7	58.1	58.1	58.1	58.1	58.1	58.1	58.1
TOTAL	492	522	522	522	522	522	522	522

TOTAL NUMBER OF OBS: 899

PCT FREQ NH <5/8: 41.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	Obscd	TOTAL Obs
	9.9	10.6	9.1	6.4	6.4	5.1	9.8	12.2	30.6	.0	971

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1870-1978

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	
	TOT %	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1	.2	
	TOT %	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1	.2	
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.1	.0	.0	.0	.3	.1	.0	.0	.0	.1	.5	
	TOT %	.1	.0	.0	.0	.3	.1	.0	.0	.0	.1	.5	
5<10	PCP	.0	.0	.1	.1	.1	.1	.0	.0	.0	.0	.3	
	NO PCP	.3	.6	.1	2.4	6.2	1.1	.4	.5	.0	1.0	12.6	
	TOT %	.3	.6	.1	2.5	6.3	1.2	.4	.5	.0	1.0	13.0	
10+	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.6	.7	.7	12.4	56.2	10.5	.7	.2	.0	4.3	86.3	
	TOT %	.6	.7	.7	12.4	56.2	10.5	.7	.2	.0	4.3	86.3	
TOT OBS													
TOT PCT													
		1.0	1.3	.8	14.9	62.7	12.0	1.1	.7	.0	5.5	100.0	1186

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1	.1	
2<5	0-3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	
	4-10	.0	.0	.0	.0	.3	.1	.0	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.0	.0	.0	.3	.1	.0	.0	.0	.1	.6	
5<10	0-3	.1	.1	.1	.1	.6	.3	.1	.1	.0	1.0	2.5	
	4-10	.2	.4	.0	1.7	3.6	.8	.2	.3	.0	.0	7.2	
	11-21	.0	.0	.0	.2	1.4	.1	.0	.0	.0	.0	1.7	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	TOT %	.3	.6	.2	2.0	5.3	1.2	.3	.4	.0	1.0	11.4	
10+	0-3	.3	.3	.3	1.0	5.3	2.0	.2	.1	.0	6.4	15.9	
	4-10	.5	.6	.6	6.5	34.2	7.7	.7	.5	.0	.0	51.3	
	11-21	.0	.1	.2	3.5	14.5	1.9	.1	.0	.0	.0	20.4	
	22+	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
	TOT %	.8	1.0	1.1	11.1	54.3	11.6	.9	.6	.0	6.4	87.9	
TOT OBS													
TOT PCT													
		1.2	1.6	1.2	13.1	60.2	13.0	1.2	.9	.0	7.5	100.0	1449

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1870-1978

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3999	3500 6499	5000 7999	6500 8000+	TOTAL	NM <3/8 ANY HGT	TOTAL OBS
00003	.0	.4	1.8	6.6	25.0	9.2	2.2	1.3	.4	48.2	51.8	228
06009	.0	.0	.8	10.9	25.1	15.9	3.3	1.3	.0	58.6	41.4	239
12015	.0	.0	1.2	9.6	28.9	20.1	5.2	.8	.4	67.1	32.9	249
18021	.0	.0	.5	4.6	21.6	14.2	4.1	1.4	.9	48.6	51.4	218
TOT	0	1	10	75	236	140	35	11	7	523	411	934
PCT	.0	.1	1.1	8.0	25.3	15.0	3.7	1.2	.7	56.0	44.0	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.3	.9	10.0	88.8	331
06009	.0	.0	.2	.2	16.3	83.3	461
12015	.0	.3	.0	.6	10.2	88.9	393
18021	.0	.0	.0	.6	12.3	87.2	359
TOT	0	1	2	8	186	1287	1484
PCT	.0	.1	.1	.5	12.5	86.7	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOURL (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <3/8 AND 5+	TOTAL OBS
00003	.0	1.8	8.7	41.3	50.0	218
06009	.0	.9	12.6	48.5	39.0	231
12015	.0	1.2	11.2	57.9	31.0	242
18021	.0	.5	5.3	45.7	49.0	208
TOT	0	10	86	437	376	899
PCT	.0	1.1	9.6	48.6	41.8	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
85/89	.0	.0	.1	.0	.0	.0	.0	.0	1	.1
80/84	.0	.0	.3	.2	.3	.0	.0	.0	8	.8
75/79	.0	.0	.1	1.0	2.1	2.5	.8	.2	65	6.8
70/74	.0	.0	.1	1.2	8.8	12.3	7.5	4.0	326	33.9
65/69	.0	.0	.0	.4	7.7	21.8	16.6	7.4	519	54.0
60/64	.0	.0	.0	.0	.9	1.6	1.4	.6	43	4.5
TOTAL	0	0	6	28	191	367	253	117	962	100.0
PCT	.0	.0	.6	2.9	19.9	38.1	26.3	12.2		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
85/89	.0	.0	.0	.0	.1	*	.0	.0	.0	.0
80/84	.0	.0	.0	.3	.5	*	.0	.0	.0	.0
75/79	.0	.0	.2	1.1	3.5	1.4	.1	.0	.0	.5
70/74	.1	.7	.0	5.6	20.3	3.7	.7	.4	.0	2.4
65/69	.7	.7	.8	7.7	32.9	6.9	.6	.3	.0	3.3
60/64	.2	.0	.0	.4	3.1	.4	.0	.2	.0	.1
TOTAL	1.0	1.4	1.0	15.1	60.4	12.5	1.4	1.0	.0	6.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	86	77	74	69	65	62	62	69.1	831
06009	78	74	72	58	64	63	60	67.7	1618
12015	83	77	75	69	64	63	62	69.2	754
18021	88	83	80	72	66	64	61	72.7	1698
TOT	88	81	77	69	64	63	60	69.9	4801

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.7	17.0	40.2	27.5	13.5	78	229		
06009	.0	1.4	13.0	39.6	31.9	14.0	79	285		
12015	.0	2.8	21.0	35.9	28.6	11.7	77	248		
18021	.0	8.2	28.3	35.6	18.9	9.0	73	233		
TOT	0	34	194	377	269	121	77	995		

PERIOD: (PRIMARY) 1908-1978
(OVER-ALL) 1870-1978

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	61 54	65 58	69 72	73 76	77 80	81 84	85 88	TOT	N FOG	NO FOG
14/16	.0	.0	.0	.0	.2	.4	.0	6	.0	.5
11/13	.0	.0	.0	.2	.4	.2	.1	10	.1	.8
9/10	.0	.2	.4	.2	.1	.1	.0	10	.0	.9
7/8	.1	.2	.4	.7	.6	.3	.0	25	.0	2.2
6	.1	.0	.4	.9	.1	.0	.0	16	.0	1.4
5	.0	.4	1.6	1.4	.4	.0	.0	43	.0	3.8
4	.0	.5	1.3	1.3	.9	.0	.0	49	.0	4.4
3	.2	.9	1.2	1.0	.2	.0	.0	39	.0	3.5
2	.3	2.7	2.5	1.2	.3	.0	.0	81	.1	7.1
1	.0	2.8	3.7	1.5	.5	.0	.0	96	.0	8.5
0	.8	6.1	5.5	1.8	.2	.0	.0	162	.0	14.4
-1	.6	6.8	6.3	2.0	.1	.0	.0	177	.1	13.6
-2	1.3	6.2	5.3	1.3	.0	.0	.0	160	.0	14.2
-3	.6	4.7	3.0	.6	.1	.0	.0	102	.0	9.1
-4	.9	4.5	1.7	.2	.0	.0	.0	82	.0	7.3
-5	.1	1.2	1.5	.2	.0	.0	.0	34	.1	2.9
-6	.2	.8	.9	.1	.1	.0	.0	23	.0	2.0
-7/-8	.0	.5	.2	.0	.0	.0	.0	8	.0	.7
-9/-10	.0	.2	.0	.0	.0	.0	.0	2	.0	.2
TOTAL	58	437	406	164	49	10	1	1125	.4	1121
PCT	5.2	38.8	36.1	14.6	4.4	.9	.1	100.0	.4	99.6

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							PCT	NE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.3	.0	.0	.0	.0	.0	.3	.3	.0	.0	.0	.0	.0	.0	.0	.8
1-2	.3	.0	.0	.0	.0	.0	.3	.3	.5	.0	.0	.0	.0	.0	.0	.8
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	.0	.0	.0	.0	.0	.5	.5	.3	.5	.0	.0	.0	.0	.0	.8

HGT	E							PCT	SE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.2	.0	.0	.0	.0	.0	.2	.7	.7	.0	.0	.0	.0	.0	.0	1.4
1-2	.0	.3	.0	.0	.0	.0	.3	.8	6.2	1.0	.0	.0	.0	.0	.0	8.0
3-4	.0	.2	.5	.0	.0	.0	.7	.0	4.2	2.0	.0	.0	.0	.0	.0	6.2
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.3	1.1	.0	.0	.0	.0	.0	1.4
7	.0	.0	.0	.0	.0	.0	.0	.0	.1	.5	.0	.0	.0	.0	.0	.5
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.2	.5	.5	.0	.0	.0	1.1	1.5	11.6	4.8	.0	.0	.0	.0	.0	17.8

PERIOD: (OVER-ALL) 1963-1978

JANUARY

AREA 0030 ANTOFAGASTA
22.15 71.7M

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	1.8	4.0	.0	.0	.0	.0	5.8	1.0	.7	.0	.0	.0	.0	1.8
1-2	2.5	20.2	2.4	.0	.0	.0	25.3	.3	4.7	.1	.0	.0	.0	5.2
3-4	.5	7.4	9.8	.3	.0	.0	18.0	.0	.9	1.6	.0	.0	.0	2.5
5-6	.0	1.5	5.5	.0	.0	.0	7.0	.3	.0	.4	.0	.0	.0	.7
7	.0	.5	3.2	.3	.0	.0	3.9	.0	.8	.0	.0	.0	.0	.8
8-9	.0	.0	.5	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.3	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	4.8	33.6	21.9	.5	.0	.0	60.8	1.6	7.1	2.2	.0	.0	.0	10.9

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.3	.2	.0	.0	.0	.5	.0	.5	.0	.0	.0	.0	.5	.0
3-4	.0	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.5	.2	.0	.0	.0	.7	.0	.5	.0	.0	.0	.0	.5	93.2

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	10.9	5.4	.0	.0	.0	.0	16.3	
1-2	4.4	32.4	3.9	.0	.0	.0	40.7	
3-4	.5	13.2	13.7	.3	.0	.0	27.7	
5-6	.3	1.4	7.0	.0	.0	.0	9.1	
7	.0	1.3	3.6	.3	.0	.0	5.2	
8-9	.0	.0	.8	.0	.0	.0	.8	
10-11	.0	.0	.3	.0	.0	.0	.3	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	16.1	54.1	29.3	.5	.0	.0	100.0	386

PERIOD: (OVER-ALL) 1949-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.5	12.7	12.9	4.1	1.4	.5	.3	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	267	3
6-7	.5	2.9	6.5	13.9	4.4	1.2	.4	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	232	5
8-9	.0	.3	2.2	6.7	5.2	2.4	.9	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	198	6
10-11	.0	.3	2.0	1.8	1.4	.1	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	45	5
12-13	.0	.0	.3	.5	.3	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	7
13-14	.0	.0	.0	.4	.7	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	7
14-15	2.6	2.4	1.8	.9	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	60	2
TOTAL	43	141	197	216	104	38	13	11	2	0	0	0	0	0	0	0	0	0	0	765	4
PCT	5.6	18.4	25.8	28.2	13.6	5.0	1.7	1.4	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1978
(OVER-ALL) 1870-1978

FEBRUARY

AREA 0030 ANTDFAGASTA
22.15 71.7M

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WIND DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SNOW	NO SIG WEA
N	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.2	.2	.0	.0	.0	.0	.3	.2	.0	.0	.0	.8	.0	98.7
S	.1	.1	.7	.0	.0	.0	.0	1.0	.3	.0	.0	.0	2.5	.0	96.2
SW	.2	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	1.8	.0	98.0
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	10.0	.0	90.0
TOT PCT OBS:	.1	.1	.4	.0	.0	.0	.0	.7	.2	.0	.0	.0	2.4	.0	96.7

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE								OTHER WEATHER PHENOMENA						
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FDG WD PCPN	FDG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SNOW	NO SIG WEA
00003	.0	.0	.4	.0	.0	.0	.0	.4	.4	.0	.0	.0	2.1	.0	97.0
06009	.0	.0	.7	.0	.0	.0	.0	.7	.0	.0	.0	.0	2.6	.0	96.7
12015	.4	.4	.4	.0	.0	.0	.0	1.3	.4	.0	.0	.0	3.9	.0	94.4
18021	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	99.0
TOT PCT OBS:	.1 934	.1	.4	.0	.0	.0	.0	.6	.2	.0	.0	.0	2.5	.0	96.7

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21
N	.9	.8	*	.0	.0	.0	1.8	4.1	.6	.0	2.0	3.6	2.0	.0	1.5	1.3	
NE	.8	.7	*	.0	.0	.0	1.6	4.1	.2	.0	2.3	3.3	2.1	.0	.9	1.3	
E	1.1	1.4	.2	*	.0	.0	2.7	4.9	.8	.0	3.0	5.0	4.2	.0	2.4	.3	
SE	2.9	12.0	2.9	*	.0	.0	17.9	7.2	13.1	16.7	16.0	19.8	21.5	27.8	20.2	13.6	
S	9.4	34.5	10.1	.1	*	.0	54.2	7.5	63.3	62.0	50.6	42.2	51.8	61.1	55.5	62.5	
SW	2.3	7.9	1.0	.0	.0	.0	11.1	6.5	13.1	17.6	12.2	7.6	7.5	.0	12.3	13.5	
W	.5	1.0	*	.0	.0	.0	1.6	4.8	2.3	.0	1.8	1.8	.7	.0	1.1	2.5	
NW	.5	.4	*	.0	.0	.0	.9	4.0	.6	.0	1.0	.9	.7	.0	1.1	1.5	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	8.3						8.3	.0	5.9	3.7	11.3	13.8	9.5	11.1	5.0	3.4	
TOT OBS	1032	2265	553	5	1	0	3856		6.4	625	27	751	493	582	18	1063	297
TOT PCT	26.8	56.7	14.3	.1	*	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	1.5	.3	.0	.0	.0		1.8	4.1	.6	2.6	2.0	1.4	
NE	1.3	.2	*	.0	.0		1.6	4.1	.2	2.7	2.0	1.0	
E	2.1	.6	*	.0	.0		2.7	4.9	.8	3.8	4.1	1.9	
SE	9.3	8.1	.5	.0	.0		17.9	7.2	13.3	17.5	21.7	18.8	
S	25.9	26.8	1.5	*	.0		54.2	7.5	63.3	47.3	52.1	57.0	
SW	6.4	4.7	.1	.0	.0		11.1	6.5	13.3	10.3	7.3	12.6	
W	1.3	.3	.0	.0	.0		1.6	4.8	2.2	1.8	.7	1.4	
NW	.8	.2	.0	.0	.0		.9	4.0	.6	.9	.7	1.2	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	8.3						8.3	.0	5.8	13.1	9.5	4.6	
TOT OBS	2188	1584	83	1	0	3856		6.4	632	1244	600	1360	
TOT PCT	56.7	41.1	2.2	*	.0		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1907-1978
(OVER-ALL) 1870-1978

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)			48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47				
0000	5.8	14.7	57.8	21.5	.2	.0	.0	7.6	100.0	652
0600	13.1	21.3	55.9	9.6	.2	.0	.0	5.5	100.0	1244
1200	9.5	19.8	58.3	12.3	.0	.0	.0	6.0	100.0	600
1800	4.6	17.0	62.0	16.2	.1	.1	.0	6.9	100.0	1360
TOT	321	711	2265	553	5	1	0	6.4		3856
PCT	8.3	18.4	58.7	14.3	.1	*	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.6	.0	.3	.1		2.9
NE	.2	.0	.2	.0		3.2
E	.3	.0	.5	.4		5.8
SE	3.8	2.5	5.2	6.6		5.4
S	14.5	7.3	14.7	22.3		5.3
SW	3.6	2.2	2.9	5.0		5.1
W	.2	.1	.2	.2		4.7
NW	.1	.0	.0	.0		2.2
VAR	.0	.0	.0	.0		.0
CALM	3.3	.7	.9	.9		3.1
TOT OBS	203	97	190	274	764	5.1
TOT PCT	26.6	12.7	24.9	35.9	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NM >4/8)
AND OCCURRENCE OF NM <5/8 BY WIND DIRECTION

000	150	300	600	1000	2000	3500	5000	6500	8000+	NM <5/8 ANY HGT	TOTAL OBS
149	299	599	999	1999	3499	4999	6499	7999			
.0	.0	.1	.0	.3	.0	.0	.0	.0	.0	.6	
.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.2	
.0	.0	.0	.0	.5	.0	.3	.1	.0	.0	.7	
.1	.0	.1	2.0	3.5	3.3	.8	.5	.2	.0	7.6	
.0	.0	.3	3.2	13.3	8.8	2.8	.9	.3	.4	26.8	
.0	.0	.1	.9	3.5	1.7	.8	.0	.0	.0	6.7	
.0	.0	.0	.0	.3	.1	.0	.0	.0	.0	.4	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.0	.1	.5	.5	.1	.0	.0	.1	4.3	
1	0	5	64	167	110	36	11	4	4	362	764
.1	.0	.7	8.4	21.9	14.4	4.7	1.4	.5	.5	47.4	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NM >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
= OR >5000	2.2	2.5	2.5	2.5	2.5	2.5	2.5	2.5
= OR >3500	6.9	7.1	7.1	7.1	7.1	7.1	7.1	7.1
= OR >2000	20.6	21.4	21.4	21.4	21.4	21.4	21.4	21.4
= OR >1000	41.7	43.2	43.2	43.2	43.2	43.2	43.2	43.2
= OR >600	49.9	51.7	51.7	51.7	51.7	51.7	51.7	51.7
= OR >300	50.5	52.3	52.3	52.3	52.3	52.3	52.3	52.3
= OR >150	50.5	52.3	52.3	52.3	52.3	52.3	52.3	52.3
= OR >0	50.6	52.5	52.5	52.5	52.5	52.5	52.5	52.5
TOTAL	390	404	404	404	404	404	404	404

TOTAL NUMBER OF OBS 770

PCT FREQ NM <5/8 47.5

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
11.4	14.0	11.1	5.5	5.2	4.5	6.5	11.2	30.6	814

PERIOD: (PRIMARY) 1907-1978
(OVER-ALL) 1870-1978

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AREA 0090 ANTOFAGASTA
22.15 71.7W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF PRECIPITATION WITH VARYING VALUES OF VISIBILITY													
VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	
	TOT %	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.2	
	TOT %	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.2	
5<10	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.2	.2	.8	2.4	.6	.1	.0	.0	.4	4.6	
	TOT %	.0	.2	.2	.8	2.4	.6	.1	.0	.0	.4	4.6	
10+	PCP	.0	.0	.0	.1	.6	.6	.0	.0	.0	.0	.7	
	NO PCP	.8	.7	1.5	16.4	55.5	13.2	.9	.3	.0	5.0	94.3	
	TOT %	.8	.7	1.5	16.4	55.5	13.2	.9	.3	.0	5.0	95.0	
TOT OBS													914
TOT PCT		.8	.9	1.6	17.2	58.8	13.6	1.0	.3	.0	5.5	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED WITH VARYING VALUES OF VISIBILITY													
VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	
	11-21	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.1	.1	.1	.6	.0	.0	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.1	.1	.1	.1	.0	.0	.0	.0	.0	.4	
5<10	0-3	.0	.2	.1	.2	.4	.1	.6	.0	.0	1.0	2.0	
	4-10	.0	.0	.0	.6	1.7	.3	.0	.0	.0	.0	2.6	
	11-21	.0	.0	.0	.2	.3	.1	.0	.0	.0	.0	.8	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.2	.1	.9	2.6	.5	.6	.0	.0	1.0	5.4	
10+	0-3	.1	.1	.2	1.8	5.7	1.8	.1	.1	.0	6.8	16.9	
	4-10	.5	.3	.9	9.9	32.4	9.8	.7	.1	.0	.0	55.6	
	11-21	.0	.1	.1	3.5	16.2	1.3	.1	.0	.0	.0	21.3	
	22+	.0	.0	.1	.0	.2	.0	.0	.0	.0	.0	.2	
	TOT %	.6	.5	1.2	15.3	55.5	13.0	.9	.2	.0	6.8	94.0	
TOT OBS													1227
TOT PCT		.6	.7	1.4	16.3	58.4	13.5	.9	.2	.0	7.8	100.0	

PERIOD: (PRIMARY) 1907-1978
(OVER-ALL) 1870-1978

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AREA 0030 ANTOFAGASTA
22.13 71.7W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY MGT	TOTAL OBS
00003	.0	.0	.5	7.4	15.8	13.4	4.5	1.0	.5	.0	43.1	56.9	202
06009	.5	.0	1.4	7.9	27.8	10.2	5.6	.9	.5	1.4	56.0	44.0	216
12015	.0	.0	.0	12.9	27.7	17.8	5.0	2.5	.0	.0	65.8	34.2	202
18021	.0	.0	.6	4.2	11.9	14.9	3.0	1.2	1.2	.6	37.5	62.5	168
TOT	1	0	5	65	168	110	36	11	4	4	404	384	788
PCT	.1	.0	.6	8.2	21.3	14.0	4.6	1.4	.5	.5	51.3	48.7	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.7	.3	4.4	94.6	294
06009	.0	.0	.2	.2	7.4	92.1	407
12015	.0	.0	.0	1.1	6.3	92.6	272
18021	.0	.0	.0	.0	3.0	97.0	270
TOT	0	0	3	5	68	1167	1243
PCT	.0	.0	.2	.4	5.5	93.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOURL (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.0	.5	8.2	36.4	55.4	195
06009	.5	1.9	10.0	47.4	42.7	211
12015	.0	.0	13.0	53.5	33.5	200
18021	.0	.6	4.9	33.5	61.6	164
TOT	1	6	71	333	366	770
PCT	.1	.8	9.2	43.2	47.5	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
80/84	.0	.0	.0	.5	.2	.5	.1	.0	11	1.3
75/79	.0	.0	.0	1.2	2.2	3.5	.7	.5	67	8.2
70/74	.0	.0	.0	2.0	13.7	18.7	11.1	3.9	404	49.4
65/69	.0	.0	.0	.4	7.2	12.4	13.3	4.3	307	37.6
60/64	.0	.0	.0	.1	.2	.7	1.5	.9	28	3.4
TOT	0	0	0	34	193	293	219	78	817	100.0
PCT	.0	.0	.0	4.2	23.6	35.9	26.8	9.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
80/84	.1	.1	.0	.2	.7	.2	.0	.0	.0	.0
75/79	.0	.0	.2	1.4	4.9	.8	.3	.0	.0	.6
70/74	.4	.3	.9	10.7	26.7	6.6	.4	.3	.0	3.1
65/69	.4	.3	.6	4.7	24.4	5.2	.2	.0	.0	1.8
60/64	.0	.0	.0	.7	2.1	.5	.2	.0	.0	.0
TOT	.9	.7	1.7	17.6	58.8	13.3	1.1	.4	.0	5.5

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	86	78	76	70	66	64	60	70.2	636
06009	77	75	73	68	64	61	58	68.5	1253
12015	84	79	75	70	65	63	62	69.4	593
18021	89	84	80	75	67	65	62	75.4	1298
TOT	89	81	77	70	65	63	58	70.7	3780

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	2.5	22.1	34.8	30.9	9.8	77	204		
06009	.0	.0	14.1	38.7	35.5	11.7	79	248		
12015	.0	3.4	26.0	32.4	26.0	12.3	76	204		
18021	.0	12.4	35.6	36.2	11.9	4.0	70	177		
TOT	0	34	196	297	225	81	76	833		

PERIOD: (PRIMARY) 1907-1978
(OVER-ALL) 1870-1978

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22.15 71.7W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TEMP DIFF	61 64	65 68	69 72	73 76	77 80	81 84	85 88	TOT	W FOG	WQ FOG
11/13	.0	.0	.4	.0	.1	.2	.1	7	.0	.8
9/10	.0	.0	.1	.2	.1	.2	.0	6	.0	.7
7/8	.0	.0	.1	.5	.2	.2	.0	9	.0	1.1
6	.0	.0	.4	.4	.4	.1	.0	10	.0	1.2
5	.0	.2	.5	.5	.6	.0	.0	15	.0	1.8
4	.0	.1	.6	.7	.6	.0	.0	17	.0	2.0
3	.1	1.2	1.9	.8	.2	.0	.0	36	.0	4.3
2	.0	1.6	2.6	2.0	.6	.0	.0	57	.0	6.8
1	.0	1.9	3.1	2.7	.2	.1	.0	68	.0	8.1
0	.4	4.8	5.4	3.0	.7	.0	.0	119	.0	14.2
-1	.4	3.9	6.3	1.7	.1	.0	.0	104	.0	12.4
-2	.6	5.7	6.8	2.6	.2	.1	.0	135	.0	16.1
-3	.5	3.0	6.9	1.4	.0	.0	.0	99	.0	11.8
-4	.2	3.2	4.5	1.4	.0	.0	.0	79	.0	9.4
-5	.1	1.9	1.9	.4	.0	.0	.0	36	.0	4.3
-6	.4	.4	1.2	.4	.0	.0	.0	19	.0	2.3
-7/-8	.1	.7	.7	.2	.0	.0	.0	15	.0	1.8
-9/-10	.1	.2	.4	.0	.0	.0	.0	6	.0	.7
-11/-12	.0	.0	.1	.0	.0	.0	.0	1	.0	.1
TOTAL	24		268		35		1	838		838
PCY	2.9	28.9	43.9	19.0	4.2	1.1	.1	100.0		100.0

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.6	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
1-2	.5	.0	.0	.0	.0	.0	.5	.3	.1	.0	.0	.0	.0	.4
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	.6	.0	.0	.0	.0	1.1	.3	.1	.0	.1	.0	.0	.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.0	.3	.0	.0	.0	.0	.3	.0	1.4	.3	.0	.0	.0	1.7
1-2	.0	.9	.3	.0	.0	.0	1.2	.7	5.3	1.5	.0	.0	.0	7.5
3-4	.0	.6	.0	.0	.0	.0	.6	.0	2.0	2.9	.0	.0	.0	4.9
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.2	1.6	.0	.0	.0	1.8
7	.0	.0	.0	.2	.0	.0	.2	.0	.3	.3	.0	.0	.0	.6
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.8	.3	.2	.0	.0	2.2	.7	9.2	6.7	.0	.0	.0	16.6

PERIOD: (OVER-ALL) 1963-1978

FEBRUARY

AREA 0030 ANTOFAGASTA
22.15 71.7W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.6	1.7	.0	.0	.0	.0	2.2	.4	.6	.3	.0	.0	.0	1.2
1-2	2.1	17.9	5.8	.0	.0	.0	25.8	.6	2.4	.4	.0	.0	.0	3.4
3-4	.5	11.3	11.0	.0	.0	.0	23.7	.6	2.7	1.7	.0	.0	.0	5.1
5-6	.0	2.3	5.1	.0	.0	.0	7.4	.0	.6	.6	.0	.0	.0	1.1
7	.0	.3	2.0	.3	.0	.0	2.5	.0	.3	.0	.0	.0	.0	.3
8-9	.0	.0	.2	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.4	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	3.2	33.5	25.3	.3	.0	.0	62.2	1.5	6.5	2.9	.0	.0	.0	11.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.2	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	
1-2	.0	.3	.2	.0	.0	.0	.5	.1	.0	.0	.0	.0	.0	.1	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.2	.3	.2	.0	.0	.0	.7	.1	.0	.0	.0	.0	.0	.1	94.4

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	6.9	4.4	.6	.0	.0	.0	11.9	
1-2	5.3	26.6	8.0	.0	.0	.0	39.9	
3-4	1.1	16.3	16.3	.0	.0	.0	33.8	
5-6	.0	3.0	7.2	.0	.0	.0	10.2	
7	.0	.8	2.2	.6	.0	.0	3.6	
8-9	.0	.0	.3	.0	.0	.0	.3	
10-11	.0	.0	.3	.0	.0	.0	.3	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	13.3	51.2	34.9	.6	.0	.0	100.0	361

PERIOD: (OVER-ALL) 1949-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.2	6.0	15.2	7.3	1.2	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	191	3
6-7	.3	1.4	9.4	7.9	3.6	.7	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	131	5
8-9	.0	1.2	3.2	6.1	5.8	2.4	2.4	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	125	6
10-11	.0	.5	1.2	2.2	2.4	1.4	.9	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	52	6
12-13	.0	.0	1.7	.2	.3	.9	.2	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	21	6
>13	.0	.0	.0	.3	.5	.3	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	8
INDET	1.0	.9	.3	2.2	.3	.7	.5	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	38	5
TOTAL	21	58	182	166	83	39	28	5	5	0	0	0	0	0	0	0	0	0	0	587	5
PCT	3.6	9.9	31.0	28.3	14.1	6.6	4.8	.9	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1909-1973
(OVER-ALL) 1871-1978

MARCH

AREA 0030 ANTOFAGASTA
22.23 71.6W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
WNO DIR	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.4	.4	.8	.0	.0	.0	.0	1.6	.0	.0	.0	.0	.0	.0	98.4
S	.0	.0	.2	.0	.0	.0	.0	.2	.1	.0	.0	.0	.1	.0	99.5
SW	.0	.0	.2	.0	.0	.0	.0	.2	.0	.0	.0	.0	3.2	.0	96.6
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	10.3	.0	89.7
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	.0	97.8
TOT PCT	.1	.1	.3	.0	.0	.0	.0	.5	.1	.0	.0	.0	.6	.0	98.8
TOT OBS:	1207														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00603	.0	.0	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3	.0	99.3
06009	.3	.3	.6	.0	.0	.0	.0	1.1	.0	.0	.0	.0	.9	.0	98.0
12015	.0	.0	.3	.0	.0	.0	.0	.3	.3	.0	.0	.0	.7	.0	98.7
18021	.0	.0	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.7	.0	99.0
TOT PCT	.1	.1	.4	.0	.0	.0	.0	.6	.1	.0	.0	.0	.6	.0	98.7
TOT OBS:	1231														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21	
N	.4	.7	*	*	.0	.0		1.2	4.9		.2	.0	1.7	1.7	.4	.0	1.5	1.3
NE	.7	.8	.1	*	.0	.0		1.5	5.7		.3	.0	1.4	2.9	2.2	.0	1.2	2.0
E	.9	1.8	.2	*	.0	.0		2.8	5.5		1.1	.0	2.8	5.8	4.1	3.4	2.1	1.4
SE	3.0	14.2	4.4	.1	.0	.0		21.7	7.8		16.4	23.1	19.6	24.1	25.1	32.4	23.9	19.2
S	8.6	34.4	10.5	.5	.0	.0		54.0	7.7		64.0	67.9	53.6	43.9	48.2	52.8	54.4	59.8
SW	2.0	6.6	1.3	.1	.0	.0		10.0	7.0		12.3	6.4	9.6	8.0	8.6	6.8	10.3	12.3
W	.4	.5	*	.0	.0	.0		.9	5.0		.7	.0	1.2	.8	1.1	.0	.9	.5
NW	.3	.7	.0	.0	.0	.0		1.0	4.8		.1	2.6	1.4	.9	.9	.0	1.1	1.4
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	7.0							7.0	.0		4.9	.0	8.6	12.0	9.3	4.5	4.7	2.2
TOT OBS	1036	2661	733	35	0	0	4465		6.9		754	39	886	634	668	44	1071	369
TOT PCT	23.2	59.6	16.4	.8	.0	.0		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	.9	.2	*	.0	.0		1.2	4.9	.2	1.7	.4	1.5	
NE	1.3	.2	*	.0	.0		1.5	4.7	.3	2.0	2.1	1.4	
E	2.0	.7	.1	.0	.0		2.8	5.5	1.1	4.1	4.1	1.9	
SE	10.0	10.8	.9	.0	.0		21.7	7.8	16.7	21.5	25.6	22.7	
S	25.2	26.5	2.1	.1	.0		54.0	7.7	64.2	49.5	48.5	55.8	
SW	5.7	3.8	.5	.0	.0		10.0	7.0	12.0	8.9	8.5	10.8	
W	.6	.3	.0	.0	.0		.9	5.0	.8	1.0	1.1	.8	
NW	.8	.2	.0	.0	.0		1.0	4.8	.2	1.2	.8	1.1	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	7.0						7.0	.0	4.7	10.0	9.0	4.0	
TOT OBS	2389	1911	160	5	0	4465		6.9	754	1520	712	1440	
TOT PCT	53.5	42.8	3.6	.1	.0		100.0		100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1909-1976
(OVER-ALL) 1871-1976

MARCH

AREA 0030 ANTOFAGASTA
22.25 71.6W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47					
0000Z	4.7	11.0	60.3	22.7	1.4	.0	.0	.0	8.1	100.0	793
0600Z	10.0	20.9	56.3	12.2	.6	.0	.0	.0	6.0	100.0	1520
1200Z	9.0	18.1	57.6	14.6	.7	.0	.0	.0	6.6	100.0	712
1800Z	4.0	13.3	63.7	18.3	.7	.0	.0	.0	7.5	100.0	1440
TOT	311	725	2601	733	35	.0	.0	.0	6.9		4463
PCT	7.0	16.2	59.6	16.4	.8	.0	.0	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.1	.0	.2	.1		4.7
NE	*	.1	.1	.3		6.3
E	.1	.2	.2	.8		6.4
SE	2.6	2.2	7.6	8.8		6.1
S	12.8	7.0	18.7	21.2		5.4
SW	3.0	1.4	2.6	4.4		5.0
W	.1	.1	.4	.4		6.5
NW	.3	.1	.3	.2		4.5
VAR	.0	.0	.0	.0		.0
CALM	1.0	.3	1.3	1.0		4.8
TOT OBS	188	107	295	350	940	5.5
TOT PCT	20.0	11.4	31.4	37.2	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.0	.0	.1	.0	.1	.1	.0	.0	.0	.1	
NE	.0	.0	.0	.3	.0	*	.0	.0	.0	.0	.2	
E	.0	.0	.0	.2	.4	.1	.1	.1	.0	.0	.5	
SE	*	.0	.9	2.8	5.5	3.3	.8	.3	.0	.1	7.6	
S	.1	.0	2.2	4.4	14.8	9.8	2.3	.8	.5	.3	24.6	
SW	.0	.0	.1	.6	2.8	1.3	.6	*	*	.2	5.9	
W	.0	.0	.0	.2	.3	.4	.0	.1	.0	.0	.2	
NW	.0	.0	.0	.0	.3	.2	.0	.0	.0	.0	.4	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.2	.4	1.0	.1	.0	.0	.1	1.7	
TOT OBS	1	0	30	81	231	151	37	12	5	6	386	940
TOT PCT	.1	.0	3.2	8.6	24.6	16.1	3.9	1.3	.5	.6	41.1	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.9	1.1	1.1	1.1	1.1	1.1	1.1	1.1
= OR >5000	2.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4
= OR >3500	5.3	6.5	6.5	6.5	6.5	6.5	6.5	6.5
= OR >2000	19.1	22.5	22.5	22.5	22.5	22.5	22.5	22.5
= OR >1000	41.8	47.1	47.2	47.2	47.2	47.2	47.2	47.2
= OR >600	49.5	55.5	55.6	55.6	55.6	55.6	55.6	55.6
= OR >300	52.5	58.6	58.7	58.7	58.7	58.7	58.7	58.7
= OR >150	52.5	58.6	58.7	58.7	58.7	58.7	58.7	58.7
= OR >0	52.6	58.7	58.8	58.8	58.8	58.8	58.8	58.8
TOTAL	504	562	563	563	563	563	563	563

TOTAL NUMBER OF OBSI 958

PCT FREQ NH <5/8 41.2

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
	9.5	9.6	8.1	7.9	5.5	5.9	7.7	12.3	33.4	1032

PERIOD: (PRIMARY) 1979-1978
(OVER-ALL) 1871-1978

4444

AREA 030 AITOFAGASTA
22.25 71.6W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.1	.0	.1	*	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.1	.0	.1	*	.0	.0	.0	.0	.0	
5<10	PCP	.0	.0	.0	.1	.1	*	.0	.0	.0	.0	.0	
	NO PCP	*	.1	.3	2.7	5.9	1.1	.1	.0	.0	.6	11.9	
	TOT %	*	.1	.3	2.8	7.1	1.2	.1	.0	.0	.6	12.1	
10+	PCP	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.4	.3	1.3	17.5	53.6	9.3	1.0	.8	.0	3.2	87.3	
	TOT %	.4	.3	1.3	17.7	53.6	9.3	1.0	.8	.0	3.2	87.6	
TOT OBS													1205
TOT PCT		.4	.4	1.7	20.5	60.8	10.5	1.1	.8	.0	3.8	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.1	.1	.2	*	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.1	.1	.2	*	.0	.0	.0	.0	.1	
5<10	0-3	.0	.0	.1	.2	.6	.3	.0	.0	.0	.6	1.8	
	4-10	.0	.1	.2	1.1	3.9	.7	*	.0	.0	.0	6.0	
	11-21	.0	.0	.0	1.1	1.7	.2	.0	.0	.0	.0	3.1	
	22+	*	*	.0	*	.2	.1	.0	.0	.0	.0	.3	
	TOT %	*	.1	.2	2.4	6.4	1.3	*	.0	.0	.6	11.1	
10+	0-3	.2	.1	.2	1.4	5.5	1.7	.2	.2	.0	4.7	14.3	
	4-10	.2	*	.7	10.4	33.8	6.7	.7	.5	.0	.0	53.1	
	11-21	.0	.1	.2	5.4	13.1	1.5	.0	.0	.0	.0	20.2	
	22+	.0	.0	.0	.2	.7	*	.0	.0	.0	.0	.9	
	TOT %	.4	.2	1.1	17.4	53.1	10.0	.9	.7	.0	4.7	88.4	
TOT OBS													1536
TOT PCT		.4	.3	1.4	19.9	59.7	11.3	1.0	.7	.0	5.3	100.0	

PERIOD: (PRIMARY) 1909-1976
(OVER-ALL) 1871-1978

MARCH

AREA 0030 ANTOFAGASTA
22.25 71.0W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	.0	.0	4.8	5.2	25.3	16.2	2.6	.4	.9	.0	55.5	44.5	229
06009	.0	.0	3.5	8.7	23.2	16.5	4.7	1.2	.4	.4	58.7	41.3	254
12015	.4	.0	1.2	12.9	30.2	16.1	4.4	1.6	.0	1.2	68.1	31.9	248
18021	.0	.0	2.8	5.9	17.4	13.8	4.0	1.6	.8	.8	47.0	53.0	253
TOT	1	0	30	81	236	154	39	12	5	6	564	420	984
PCT	.1	.0	3.0	8.2	24.0	15.7	4.0	1.2	.5	.6	57.3	42.7	100.0

TABLE 11

PERCENT FREQUENCY VS BY (NH) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.0	.6	12.3	87.2	351
06009	.0	.0	.0	.2	15.8	84.0	494
12015	.0	.0	.3	.9	10.9	88.0	341
18021	.0	.0	.3	.0	4.6	94.9	375
TOT	0	0	2	6	176	1377	1561
PCT	.0	.0	.1	.4	11.3	88.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VS BY (NH) AND/OR
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <5000	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	.0	5.0	10.4	47.1	42.5	221
06009	.0	3.6	12.4	47.2	40.4	250
12015	.4	1.6	15.2	54.1	30.7	244
18021	.0	2.5	8.6	39.9	51.4	243
TOT	1	30	112	451	395	958
PCT	.1	3.1	11.7	47.1	41.2	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
85/89	.0	.0	.2	.0	.1	.0	.0	.0	3	.3
80/84	.0	.0	.1	.0	.3	.3	.1	.0	8	.6
75/79	.0	.1	.0	2.1	2.5	2.2	.0	.0	73	6.8
70/74	.0	.0	.2	2.5	13.4	14.6	6.1	2.5	420	39.4
65/69	.0	.0	.0	1.2	7.9	15.4	15.7	4.6	477	44.7
60/64	.0	.0	.0	.0	.5	1.9	2.8	2.8	85	8.0
TOTAL	0	1	5	62	263	366	263	106	1066	100.0
PCT	.0	.1	.5	5.8	24.7	34.3	24.7	9.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.1	.1	.1	.0	.0	.0	.0
.0	.0	.1	.3	.2	.1	.0	.0	.0	.0
.0	.1	.1	1.4	4.4	.7	.0	.0	.0	.2
.0	.2	.3	9.9	23.3	3.9	.4	.2	.0	1.4
.3	.2	.8	8.0	26.9	5.5	.7	.6	.0	1.8
.1	.2	.3	.8	4.7	1.2	.1	.1	.0	.8
.3	.4	1.6	20.6	59.5	11.5	1.1	.9	.0	4.1

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	90%	5%	1%	MIN	MEAN	TOTAL OBS
00003	83	77	74	68	64	61	60	68.6	784
06009	80	74	73	66	62	60	59	68.8	1541
12015	83	77	74	68	63	61	61	68.4	703
18021	89	83	78	72	66	63	60	71.8	1347
TOT	89	80	76	69	63	60	59	68.9	4375

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	3.7	26.5	36.3	25.3	8.2	75	245		
06009	.0	1.9	14.6	32.6	32.9	18.0	79	322		
12015	.0	4.4	23.3	36.7	25.9	9.6	76	270		
18021	.0	16.1	35.8	31.9	11.8	4.3	69	254		
TOT	0	68	266	374	268	115	75	1091		

PERIOD: (PRIMARY) 1909-1978
(OVER-ALL) 1871-1978

MARCH

AREA 0030 ANTOFAGASTA
22.2S 71.6W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	57 60	61 64	65 68	69 72	73 76	77 80	81 84	TOT	W FOG	NO FOG
11/13	.0	.0	.1	.0	.2	.0	.1	4	.0	.4
9/10	.0	.0	.2	.5	.2	.0	.0	9	.0	.8
7/8	.0	.0	.3	.9	.3	.4	.3	23	.0	2.1
6	.0	.0	.1	.4	.4	.3	.1	13	.0	1.2
5	.0	.1	.5	.2	.4	.5	.1	20	.0	1.8
4	.0	.2	1.0	.8	.9	.5	.0	38	.0	3.4
3	.1	.6	1.2	1.1	1.0	.5	.0	49	.0	4.4
2	.0	.4	1.9	3.2	2.0	.5	.0	87	.0	7.8
1	.0	.2	2.3	2.9	1.7	.5	.0	83	.0	7.5
0	.1	1.2	5.3	4.3	2.4	.3	.1	152	.0	13.7
-1	.1	.7	4.1	5.8	1.7	.1	.0	138	.0	12.4
-2	.0	1.1	5.2	5.9	2.1	.1	.0	160	.0	14.4
-3	.0	.5	3.7	5.0	1.0	.0	.0	113	.0	10.2
-4	.0	1.2	3.1	3.8	.8	.1	.0	99	.0	8.9
-5	.1	.5	1.6	3.0	.4	.0	.0	62	.0	5.6
-6	.0	.4	1.3	1.2	.3	.0	.0	34	.0	3.1
-7/-8	.0	.3	.5	.9	.1	.0	.0	20	.0	1.8
-9/-10	.0	.3	.1	.2	.0	.0	.0	6	.0	.5
-11/-13	.0	.1	.0	.0	.0	.0	.0	1	.0	.1
TOTAL	4	85	359	442	174	60	7	1111	0	1111
PCT	.4	7.7	32.3	39.8	15.7	3.6	.6	100.0	0.0	100.0

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.2	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.0	.3
1-2	.0	.2	.0	.0	.0	.0	.2	.0	.1	.2	.0	.0	.0	.3
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.3	.0	.0	.0	.0	.3	.3	.3	.2	.0	.0	.0	.8

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.3	.2	.0	.0	.0	.0	.6	.2	.5	.3	.0	.0	.0	1.0
1-2	.0	.6	.2	.0	.0	.0	.8	.2	7.1	4.3	.0	.0	.0	11.7
3-4	.0	.6	.0	.0	.0	.0	.6	.0	1.9	4.0	.0	.0	.0	5.9
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.2	2.3	.5	.0	.0	3.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0	.0	.4
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.2	.4	.0	.0	.0	.7
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.3	1.4	.2	.0	.0	.0	2.0	.4	10.0	11.7	.6	.0	.0	22.7

PERIOD: (OVER-ALL) 1963-1978

MARCH

AREA 0030 ANTOFAGASTA
22.25 71.0W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.7	2.7	.4	.0	.0	.0	3.8	.0	.8	.0	.0	.0	.0	.8	
1-2	.9	16.3	5.4	.0	.0	.0	22.5	.7	2.7	.3	.0	.0	.0	3.7	
3-4	.3	11.7	6.7	.0	.0	.0	18.8	.3	2.2	.5	.0	.0	.0	3.0	
5-6	.0	3.2	4.7	.8	.0	.0	8.7	.0	1.1	1.2	.2	.0	.0	2.4	
7	.0	.0	1.9	.8	.0	.0	2.7	.0	.0	.2	.0	.0	.0	.2	
8-9	.0	.0	.0	.4	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	1.9	33.8	19.1	2.0	.0	.0	56.8	1.0	6.7	2.2	.2	.0	.0	10.1	

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.2	.2	.0	.0	.0	.0	.4	.0	1.2	.0	.0	.0	.0	1.2	
1-2	.0	.7	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	
3-4	.0	.2	.0	.0	.0	.0	.2	.0	.1	.0	.0	.0	.0	.1	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.2	1.1	.0	.0	.0	.0	1.3	.0	1.2	.0	.0	.0	.0	1.2	95.4

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT DBS
<1	7.0	5.7	.7	.0	.0	.0	13.4	
1-2	1.8	27.6	10.3	.0	.0	.0	39.7	
3-4	.7	16.7	11.2	.0	.0	.0	28.5	
5-6	.0	4.4	8.1	1.5	.0	.0	14.0	
7	.0	.0	2.4	.9	.0	.0	3.3	
8-9	.0	.2	.4	.4	.0	.0	1.1	
10-11	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	9.4	54.6	33.1	2.9	.0	.0	100.0	456

PERIOD: (OVER-ALL) 1949-1978

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.9	10.3	12.3	6.4	1.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	277	3
6-7	.0	2.5	6.3	7.0	5.5	2.4	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	214	5
8-9	.0	.0	2.9	5.0	5.3	1.4	.5	.0	.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	152	6
10-11	.0	.0	1.4	2.5	2.1	1.6	1.0	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	76	5
12-13	.0	.0	.0	1.0	.8	1.1	.5	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	31	6
>13	.0	.0	.0	.0	.4	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	7
INDET	3.1	.7	3.0	.6	.6	.6	.5	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	77	3
TOTAL	50	142	234	188	129	55	26	8	4	2	0	0	0	0	0	0	0	0	0	828	4
PCT	6.0	16.9	27.9	22.4	15.4	6.6	3.1	1.0	.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1871-1977

APRIL

AREA 0030 ANTOFAGASTA
22.15 71.5W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WE
N	.0	.0	5.6	.0	.0	.0	.0	5.6	.0	5.6	.0	.0	.0	.0	88.7
NE	1.4	.0	5.7	.0	.0	.0	.0	7.1	.0	5.7	.0	.0	5.7	.0	81.4
E	4.3	.0	.0	.0	.0	.0	.0	4.3	.0	.0	.0	.0	5.8	.0	89.9
SE	.0	.5	.5	.0	.0	.0	.0	.9	1.5	.0	.0	.0	.5	.0	97.1
S	.0	.3	.2	.0	.0	.0	.0	.4	.1	.0	.0	.0	.1	.2	99.2
SW	.0	1.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	.0	1.8	.0	97.2
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.7	.0	97.3
TOT PCT	.1	.3	.3	.0	.0	.0	.0	.8	.3	.2	.0	.0	.7	.1	97.9
TOT OBS:	1150														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WE
0000	.0	.4	.4	.0	.0	.0	.0	.7	.0	.0	.0	.0	.4	.4	98.5
0600	.3	.6	.6	.0	.0	.0	.0	1.4	.3	.6	.0	.0	.3	.0	97.5
1200	.0	.3	.3	.0	.0	.0	.0	.7	1.0	.0	.0	.0	2.1	.0	96.2
1800	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	99.6
TOT PCT	.1	.3	.3	.0	.0	.0	.0	.8	.3	.2	.0	.0	.8	.1	97.9
TOT OBS:	1175														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	0-3	WIND SPEED (KNOTS)						48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)					
		4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21
N	1.1	1.4	.3	.0	.0	.0		2.8	5.4	1.3	.0	3.9	4.8	3.4	.0	1.6	2.4
NE	.8	1.3	.1	.0	.0	.0		2.2	5.3	1.2	3.0	2.2	4.6	2.2	.0	1.3	3.1
E	1.4	1.9	.2	.0	.0	.0		3.6	5.0	1.6	.0	4.1	5.9	4.2	2.7	3.5	1.6
SE	3.5	12.2	4.8	.1	.0	.0		20.6	7.9	16.8	29.5	18.7	21.0	25.4	27.7	22.7	16.2
S	8.2	30.3	10.7	.3	.0	.0		49.6	7.8	55.2	50.0	48.5	41.7	46.9	37.5	51.0	55.0
SW	2.2	5.9	1.3	.1	.0	.0		9.5	6.7	13.5	11.4	8.4	5.4	6.1	17.9	10.5	13.1
W	.4	.6	.0	.0	.0	.0		1.0	4.5	1.0	.0	1.0	1.0	1.1	.0	1.1	1.0
NW	.4	1.1	.1	.0	.0	.0		1.6	6.5	.7	3.0	1.0	1.4	.9	.0	3.0	2.0
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	9.2							9.2	.0	8.8	3.0	12.2	14.2	9.8	14.3	5.4	5.7
TOT OBS	1190	2394	766	22	0	0		4372	6.7	717	33	884	597	833	28	1112	368
TOT PCT	27.2	54.8	17.5	.5	.0	.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	1.9	.8	*	.0	.0		2.8	5.4	1.2	4.3	3.3	1.8	
NE	1.5	.7	*	.0	.0		2.2	5.3	1.2	3.2	2.1	1.7	
E	2.7	.8	*	.0	.0		3.6	5.0	1.6	4.8	4.2	3.0	
SE	9.6	9.6	1.4	.0	.0		20.6	7.9	17.4	19.6	25.5	21.1	
S	23.4	22.6	2.6	*	.0		49.6	7.8	55.0	45.7	46.5	52.0	
SW	5.5	2.8	.2	*	.0		9.5	6.7	13.4	7.2	6.6	11.1	
W	.9	.1	.0	.0	.0		1.0	4.5	.9	1.0	1.0	1.0	
NW	.9	.7	*	.0	.0		1.6	6.5	.8	1.2	.9	2.8	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	9.2						9.2	.0	8.5	13.0	10.0	5.5	
TOT OBS	2430	1749	192	1	0	4372	750	1481	661	1480			
TOT PCT	55.6	40.0	4.4	*	.0		100.0		100.0	100.0	100.0	100.0	

APRIL

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1871-1977AREA 0030 ANTUFAGASTA
22.15 71.5W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	11-21	22-33	34-47	48+	MEAN	PCT FREQ	TOTAL OBS
00003	8.5	14.5	52.9	23.3	.7	.0	.0	7.5	100.0	750
06009	13.0	21.7	50.9	13.8	.5	.0	.0	5.9	100.0	1481
12015	10.0	16.5	55.5	17.5	.5	.0	.0	6.8	100.0	661
18021	3.5	18.6	59.2	18.3	.4	.0	.0	7.2	100.0	1480
TOT	404	786	2394	766	22	0	0	6.7		4372
PCT	9.2	18.0	54.8	17.5	.5	.0	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8-10	TOTAL OBS	MEAN CLOUD COVER
N	.2	.1	.5	.1	5.2	
NE	.1	.1	.2	.4	5.5	
E	.3	.0	.7	.7	5.9	
SE	1.1	1.8	5.8	10.8	6.7	
S	11.6	5.0	15.2	27.0	5.8	
SW	1.9	1.2	2.0	4.9	5.7	
W	.6	.3	.0	.8	4.4	
NW	.1	.1	.4	.2	6.0	
VAR	.0	.0	.0	.0	5.8	
CALM	1.6	.2	.8	3.7	5.9	
TOT OBS	156	78	227	430	891	
TOT PCT	17.5	8.8	25.5	48.3	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	6499	6499	7999			
N	.0	.0	.0	.2	.2	.2	.0	.0	.0	.0	.3	
NE	.0	.0	.0	.3	.3	.2	.0	.0	.0	.0	.4	
E	.0	.1	.0	.1	.8	.1	.3	.0	.0	.0	.4	
SE	.1	.4	.4	2.5	5.8	3.8	1.4	.5	.1	.3	4.2	
S	.3	1.1	.6	6.6	17.0	9.3	3.0	1.0	.2	.6	20.0	
SW	.0	.0	.0	1.0	3.0	1.3	.3	.1	.0	.0	3.9	
W	.0	.0	.0	.2	.4	.1	.0	.0	.0	.0	1.0	
NW	.0	.0	.1	.0	.1	.1	.0	.0	.0	.0	.2	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.1	.7	1.8	1.2	.3	.0	.0	.2	1.9	
TOT OBS	4	5	11	101	262	144	49	14	3	10	288	891
TOT PCT	.4	.6	1.2	11.3	29.4	16.2	5.5	1.6	.3	1.1	32.3	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)			VSBY (NH)			VSBY (NH)			VSBY (NH)		
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0		>10	>5	>2
>6500	1.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4				
>5000	2.2	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
>3500	6.9	8.5	8.5	8.5	8.5	8.5	8.5	8.5				
>2000	20.8	24.3	24.6	24.6	24.6	24.6	24.6	24.6				
>1000	44.0	53.2	53.8	53.8	53.8	53.8	53.8	53.8				
>600	53.1	64.5	65.1	65.1	65.1	65.1	65.1	65.1				
>300	54.3	65.7	66.4	66.4	66.4	66.4	66.4	66.4				
>150	54.8	66.3	66.9	66.9	66.9	66.9	66.9	66.9				
>0	54.9	66.7	67.4	67.4	67.4	67.4	67.4	67.4				
TOTAL	493	601	607	607	607	607	607	607				

TOTAL NUMBER OF OBS: 901

PCT FREQ NH <5/8: 32.6

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	UBSCD	TOTAL OBS
10.8	6.4	6.6	4.0	5.4	3.5	8.1	11.7	43.2	.3	977

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1871-1977

APRIL

AREA 0030 ANTOFAGASTA
22.1S 71.5W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	
2<5	PCP	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.1	.1	.1	.0	.0	.0	.0	.0	
5<10	PCP	.1	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.9	.7	.2	2.8	8.1	2.0	.4	.2	.0	1.5	16.8	
	TOT %	1.0	.8	.2	2.9	8.1	2.0	.4	.2	.0	1.5	17.0	
10+	PCP	.0	*	.1	.1	.2	*	.0	.0	.0	.0	.4	
	NO PCP	.5	.6	1.3	15.4	49.2	8.7	.9	.5	.0	5.0	82.1	
	TOT %	.5	.7	1.3	15.5	49.4	8.7	.9	.5	.0	5.0	82.5	
TOT OBS													1190
TOT PCT		1.5	1.5	1.5	18.6	57.5	10.8	1.3	.8	.0	6.4	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.1	.2	.2	.1	.1	*	.0	.0	.0	
	11-21	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.0	.1	.2	.2	.1	.1	*	.0	.0	.0	
5<10	0-3	.5	.0	*	.4	.9	.4	*	.0	.0	1.5	3.8	
	4-10	.4	.6	.1	1.3	4.3	1.2	.3	.2	.0		8.4	
	11-21	.1	.0	.0	.9	1.9	.2	.0	.0	.0		3.1	
	22+	.0	.0	.0	.0	.1	.0	.0	.0	.0		.1	
	TOT %	1.0	.6	.2	2.6	7.2	1.8	.3	.2	.0	1.5	15.3	
10+	0-3	.5	.3	.3	1.5	4.6	1.5	.2	.1	.0	6.4	15.4	
	4-10	.4	.3	.9	8.6	32.2	6.1	.5	.4	.0		49.3	
	11-21	.0	*	.2	4.8	12.0	1.8	.0	.0	.0		18.9	
	22+	.0	.0	.0	.1	.1	.0	.0	.0	.0		.2	
	TOT %	.9	.5	1.4	14.9	49.0	9.5	.7	.5	.0	6.4	83.7	
TOT OBS													1489
TOT PCT		1.9	1.2	1.6	17.7	56.4	11.4	1.1	.7	.0	7.9	100.0	

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1871-1977

APRIL

AREA 0090 ANYTOFAGASTA
22.15 71.5W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY MGT	TOTAL OBS
00003	.5	.9	.5	8.1	28.0	15.2	8.5	.9	.5	.0	63.0	37.0	211
06009	.8	.0	2.3	9.1	29.7	13.3	4.6	1.1	.0	2.7	63.5	36.5	263
12015	.0	.8	.4	15.6	31.7	18.9	3.3	2.5	.4	.8	74.5	25.5	243
18021	.5	.5	1.4	10.6	23.5	14.7	5.5	1.4	.5	.5	59.0	41.0	217
TOT	4	3	11	102	265	145	50	14	3	10	609	325	934
PCT	.4	.3	1.2	10.9	28.4	15.5	5.4	1.5	.3	1.1	65.2	34.8	100.0

TABLE 11

PERCENT FREQUENCY VS BY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.0	.6	15.7	83.7	344
06009	.0	.0	.2	.6	18.5	80.7	497
12015	.0	.0	.6	.9	13.3	85.2	391
18021	.0	.0	.0	1.2	14.3	84.5	342
TOT	0	0	3	12	239	1514	
PCT	.0	.0	.2	.8	15.8	83.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VS BY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOURL (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.5	2.0	10.8	54.4	34.8	204
06009	.8	3.2	13.5	52.8	33.7	252
12015	.0	1.3	18.2	58.5	23.3	236
18021	.5	2.4	15.3	46.4	38.3	209
TOT	4	20	131	479	291	901
PCT	.4	2.2	14.5	53.2	32.3	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
80/84	.0	.0	.0	.2	.2	.0	.1	.0	5	.5
75/79	.0	.0	.0	.3	.4	.4	.2	.2	15	1.5
70/74	.0	.0	.0	.9	6.2	5.0	1.3	.3	137	13.7
65/69	.0	.0	.0	1.7	11.6	19.3	14.6	2.7	499	49.9
60/64	.0	.0	.0	.2	3.5	13.7	11.8	3.8	330	32.9
55/59	.0	.0	.0	.0	.0	.3	1.0	.3	16	1.6
TOTAL	0	0	0	33	219	387	290	73	1002	100.0
PCT	.0	.0	.0	3.3	21.9	38.6	28.9	7.3		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.4	.0	.1	*	.0	.0
.0	.0	.1	.3	.5	.2	.1	*	.0	.2
.2	.2	.1	4.3	6.9	1.2	.1	.2	.0	.5
.9	.9	1.0	9.7	28.2	4.6	.8	.4	.0	3.2
.7	.6	.9	5.2	19.0	3.2	.3	.2	.0	2.8
.1	.2	.0	.1	1.0	.0	.1	.0	.0	.0
2.0	1.9	2.1	19.6	56.0	9.3	1.6	.8	.0	6.7

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	76	73	71	66	61	59	57	66.0	754
06009	76	71	69	64	60	58	54	64.5	1494
12015	80	75	71	65	60	58	54	65.6	660
18021	85	80	76	69	63	61	56	68.9	1402
TOT	85	77	73	66	61	58	54	66.4	4310

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	2.1	16.8	39.1	36.1	5.9	77	238		
06009	.0	1.6	14.1	37.0	34.7	12.5	79	311		
12015	.0	2.4	20.2	41.9	28.9	6.7	76	253		
18021	.0	7.5	37.6	36.3	15.0	3.5	71	226		
TOT	0	33	220	396	301	78	76	1028		

PERIOD: (PRIMARY) 1909-1977
(OVER-ALL) 1871-1977

APRIL

TABLE 17

AREA 0030 ANTOFAGASTA
22.15 71.5W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	57 60	61 64	65 68	69 72	73 76	77 80	81 84	TOT	N FOG	WD FOG
11/13	.0	.0	.0	.1	.1	.0	.1	3	.0	.3
9/10	.0	.0	.0	.0	.2	.0	.0	2	.0	.2
7/8	.0	.0	.2	.1	.1	.4	.1	9	.0	.9
6	.0	.0	.4	.1	.4	.2	.0	11	.0	1.1
5	.0	.0	.4	.3	.0	.0	.0	7	.0	.7
4	.0	.6	.8	.8	.4	.0	.0	26	.0	2.5
3	.0	.4	1.6	.7	.1	.3	.0	32	.0	3.1
2	.0	1.1	1.5	1.7	.6	.1	.0	52	.0	5.0
1	.3	1.8	2.2	1.2	.3	.2	.0	62	.0	6.0
0	.4	3.8	5.0	2.9	.7	.0	.0	132	.0	12.7
=1	.4	3.6	6.0	2.9	.5	.1	.0	139	.0	13.4
=2	.6	3.6	7.4	4.0	.6	.0	.0	168	.0	16.2
=3	.3	4.1	6.1	2.4	.1	.0	.0	135	.0	13.0
=4	.3	3.8	4.3	1.3	.0	.0	.0	102	.0	9.8
=5	.3	3.5	3.1	1.2	.0	.0	.0	83	.0	8.0
=6	.3	2.2	1.3	.1	.0	.0	.0	41	.0	3.9
=7/-8	.1	1.0	1.0	.2	.0	.0	.0	23	.0	2.2
=9/-10	.2	.3	.3	.0	.0	.0	.0	8	.0	.8
=11/-13	.0	.2	.0	.0	.0	.0	.0	4	.0	.4
TOTAL	22	310	434	207	41	13	2	1039	0	1039
PCT	3.1	29.8	41.8	19.9	3.9	1.3	.2	100.0		100.0

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	N	22-33	34-47	48+	PCT	1-3	4-10	11-21	NE	22-33	34-47	48+	PCT
<1	.0	.4	.0	.0	.0	.0	.0	.4	.2	.1	.0	.0	.0	.0	.0	.3
1-2	.2	.2	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.2	.5	.0	.0	.0	.0	.0	.8	.2	.1	.0	.0	.0	.0	.0	.3

HGT	1-3	4-10	11-21	E	22-33	34-47	48+	PCT	1-3	4-10	11-21	SE	22-33	34-47	48+	PCT
<1	.2	.2	.0	.0	.0	.0	.0	.4	.6	1.2	.1	.0	.0	.0	.0	1.8
1-2	.0	1.3	.0	.0	.0	.0	.0	1.3	.2	6.5	2.1	.0	.0	.0	.0	8.9
3-4	.0	.0	.2	.0	.0	.0	.0	.2	.0	2.9	4.6	.0	.0	.0	.0	7.5
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	1.4	.2	.0	.0	.0	2.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	.0	.0	.0	1.2
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.4
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.2	1.5	.2	.0	.0	.0	.0	1.9	.9	10.9	9.9	.2	.0	.0	.0	21.9

PERIOD: (OVER-ALL) 1963-1977

APRIL

AREA 0030 ANTOFAGASTA
22.15 71.5W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.9	4.0	.4	.0	.0	.0	5.4	.0	.3	.0	.0	.0	.0	.3
1-2	1.0	21.3	9.7	.0	.0	.0	32.0	.0	3.3	1.3	.0	.0	.0	4.8
3-4	.0	8.0	7.4	.0	.0	.0	15.3	.0	1.1	1.2	.0	.0	.0	2.3
5-6	.0	1.3	4.4	.5	.0	.0	6.2	.0	.3	.2	.0	.0	.0	.5
7	.0	.0	1.0	.0	.0	.0	1.0	.0	.2	.0	.0	.0	.0	.2
8-9	.0	.0	1.3	.0	.0	.0	1.3	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.2	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.9	34.5	24.4	.5	.0	.0	61.3	.0	3.9	2.7	.0	.0	.0	8.2

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.4	.0	.0	.0	.0	.4	.0	.1	.0	.0	.0	.0	.1	
1-2	.0	.2	.7	.0	.0	.0	.2	.0	.1	.0	.0	.0	.0	.1	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	.7	.0	.0	.0	.0	.7	.0	.1	.0	.0	.0	.0	.1	95.1

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	7.9	6.5	.5	.0	.0	.0	14.9	
1-2	1.4	32.9	12.9	.0	.0	.0	47.2	
3-4	.0	11.8	13.2	.0	.0	.0	24.9	
5-6	.0	1.9	6.0	.7	.0	.0	8.6	
7	.0	.2	2.2	.0	.0	.0	2.4	
8-9	.0	.0	1.7	.0	.0	.0	1.7	
10-11	.0	.0	.2	.0	.0	.0	.2	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	9.4	53.2	36.7	.7	.0	.0	100.0	417

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	3.3	9.1	10.6	8.4	1.7	1.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	260	3
6-7	.0	.9	8.0	8.8	2.9	2.1	.5	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	180	5
8-9	.0	.4	2.6	6.9	6.5	1.5	.4	.0	.9	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	146	6
10-11	.0	1.2	.9	2.1	2.2	1.8	.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	69	6
12-13	.0	.0	.5	.5	.0	.0	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	6
13-14	.0	.0	.0	.8	.7	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	7
INDET	4.1	1.7	1.7	1.1	1.1	.3	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	78	3
TOTAL	56	101	185	217	114	53	16	7	8	1	0	0	0	0	0	0	0	0	0	758	5
PCT	7.4	13.3	24.4	28.6	15.0	7.0	2.1	.9	1.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977

MAY

AREA 0030 ANTOFAGASTA
22.15 71.3W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.2	.0	.0	.0	.0	95.8
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.0	.6	.0	.0	.0	.0	.6	.0	.0	.0	.0	.1	.0	99.3
S	.0	.0	.0	.0	.0	.0	.0	.0	.2	.6	.0	.0	.7	.0	98.5
SW	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	1.5	.0	97.6
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	2.3	.0	.0	.0	.0	2.3	.0	.0	1.2	.0	4.7	.0	91.9
TOT PCT	.0	.0	.3	.0	.0	.0	.0	.3	.2	.4	.1	.0	1.0	.0	98.0
TOT OBS:	945														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST BLWG SNOW	NO SIG WEA
00603	.0	.0		.0	.0	.0	.0	.0	.9	.0	.0	.0	1.3	.0	97.8
06609	.0	.0	1.1	.0	.0	.0	.0	1.1	.0	1.5	.0	.0	.4	.0	97.0
12015	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	1.7	.0	97.9
18021	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	99.6
TOT PCT	.0	.0	.3	.0	.0	.0	.0	.3	.2	.4	.1	.0	.9	.0	98.0
TOT OBS:	971														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21
N	1.6	1.9	.2	.0	.0	.0		3.7	4.8	2.4	.0	3.6	5.1	4.3	3.3	3.6	3.9
NE	1.3	1.9	.1	.0	.0	.0		3.3	4.7	2.2	11.1	2.0	4.8	5.4	10.0	3.0	2.5
E	1.7	1.8	.2	.0	.0	.0		3.7	4.7	2.1	.0	2.8	6.8	4.8	.0	3.9	1.5
SE	3.4	11.4	4.8	.3	.0	.0		20.0	8.1	17.4	5.6	19.0	18.9	23.6	25.0	21.8	16.8
S	8.5	26.1	9.4	.6	.0	.0		44.6	7.9	50.7	58.3	45.0	38.3	41.3	45.0	44.7	47.0
SW	2.3	6.3	.8	.0	.0	.0		9.4	6.0	11.7	25.0	8.8	6.0	5.1	10.0	11.5	11.5
W	.8	.6	.1	.0	.0	.0		1.5	4.0	1.0	.0	2.1	1.5	.9	.0	1.3	2.5
NW	1.2	1.5	.1	.0	.0	.0		2.7	4.8	1.8	.0	3.0	3.3	2.2	.0	2.9	3.8
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	11.2							11.2	.0	10.7	.0	13.5	15.3	12.5	6.7	7.5	10.6
TOT OBS	1416	2292	695	44	0	0	4447		6.4	719	9	834	594	657	15	1242	377
TOT PCT	31.8	51.5	15.6	1.0	.0	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40					00 03	06 09	12 15	18 21
N	3.0	.6	.1	.0	.0		3.7	4.8	2.4	4.2	4.3	3.6
NE	2.6	.7	.0	.0	.0		3.3	4.7	2.3	3.2	5.5	2.9
E	3.0	.6	.1	.0	.0		3.7	4.7	2.1	4.5	4.7	3.3
SE	9.7	8.6	1.6	.1	.0		20.0	8.1	17.2	19.0	23.6	20.6
S	21.9	19.2	3.4	.1	.0		44.6	7.9	50.8	42.2	41.4	45.2
SW	6.3	2.8	.2	.0	.0		9.4	6.0	11.9	7.7	5.2	11.5
W	1.3	.2	.0	.0	.0		1.5	4.0	1.0	1.9	.9	1.6
NW	2.1	.7	.0	.0	.0		2.7	4.8	1.8	3.1	2.1	3.1
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	11.2						11.2	.0	10.6	14.3	12.4	8.2
TOT OBS	2718	1482	238	9	0	4447		6.4	728	1428	672	1619
TOT PCT	61.1	33.3	5.4	.2	.0		100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977

MAY

AREA 0030 ANTOFAGASTA
22.1S 71.3W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				MEAN	PCT FREQ	TOTAL OBS
				11-21	22-23	34-47	48+			
0000Z	10.6	16.6	53.2	18.8	.8	.0	.0	7.0	100.0	728
0600Z	14.3	21.7	50.1	13.1	.8	.0	.0	5.7	100.0	1428
1200Z	12.4	19.5	51.3	15.9	.9	.0	.0	6.3	100.0	672
1800Z	8.2	22.1	52.1	16.3	1.3	.0	.0	6.7	100.0	1619
TOT	497	919	2292	695	44	0	0	6.4		4447
PCT	11.2	20.7	51.5	15.6	1.0	.0	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS CD	TOTAL OBS	MEAN CLOUD COVER
N	.1	.4	.3	1.2		6.6
NE	.4	.1	.0	1.6		6.5
E	.1	.4	1.0	1.0		6.3
SE	.9	1.2	6.1	10.2		6.9
S	5.7	4.0	13.5	29.8		6.5
SW	1.2	.7	1.7	6.7		6.5
W	.4	.3	.1	.7		5.1
NW	.3	.2	.2	.9		5.8
VAR	.0	.0	.0	.0		.0
CALM	1.7	.5	1.1	4.9		5.4
TOT OBS	83	59	181	430	753	6.5
TOT PCT	11.0	7.8	24.0	57.1	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NM >4/8)
AND OCCURRENCE OF NM <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999			
N	.0	.0	.1	.1	.4	.3	.2	.3	.1	.0	.5	
NE	.0	.0	.1	.2	.6	.3	.4	.0	.1	.0	.5	
E	.0	.0	.0	.2	1.0	.2	.2	.0	.1	.0	.8	
SE	.2	.5	.1	2.6	7.5	2.9	1.1	.0	.1	.0	3.5	
S	.1	.5	.2	10.1	19.0	7.2	2.1	.8	.3	.0	12.7	
SW	.0	.2	.0	1.6	4.0	1.4	.7	.0	.0	.1	2.4	
W	.0	.0	.0	.1	.2	.0	.4	.0	.0	.0	.9	
NW	.0	.0	.1	.2	.4	.3	.0	.0	.0	.0	.6	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.1	.0	.8	2.5	1.5	.7	.1	.0	.0	2.5	
TOT OBS	2	10	5	118	267	106	46	9	5	1	184	753
TOT PCT	.3	1.3	.7	15.7	35.5	14.1	6.1	1.2	.7	.1	24.4	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NM >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.6	.6	.6	.6	.6	.6	.6	.6
>5000	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
>4500	7.3	8.0	8.0	8.0	8.0	8.0	8.0	8.0
>4000	20.9	22.4	22.4	22.4	22.4	22.4	22.4	22.4
>3500	50.6	58.0	58.1	58.1	58.1	58.1	58.1	58.1
>3000	63.7	73.3	73.5	73.5	73.5	73.5	73.5	73.5
>2500	64.1	73.9	74.2	74.2	74.2	74.2	74.2	74.2
>2000	65.4	75.2	75.5	75.5	75.5	75.5	75.5	75.5
>1500	65.6	75.5	75.7	75.7	75.7	75.7	75.7	75.7
TOTAL	506	582	584	584	584	584	584	584

TOTAL NUMBER OF OBS 771

PCT FREQ NH <5/8 24.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS CD	TOTAL OBS
6.5	4.0	3.6	5.0	5.0	4.2	6.3	14.0	51.4	.0	835

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977

MAY

AREA 0030 ANTOFAGASTA
22.15 71.3W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF PRECIPITATION WITH VARYING VALUES OF VISIBILITY													
VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	.2	.2
	TOT %	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	.2	.2
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	.2	.2
	TOT %	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	.2	.2
5<10	PCP	.0	.0	.0	.1	.0	.0	.0	.0	.0	.2	.3	.3
	NO PCP	.8	.5	.5	1.2	5.9	2.1	.0	.2	.0	2.3	13.5	13.5
	TOT %	.8	.5	.5	1.3	5.9	2.1	.0	.2	.0	2.5	13.8	13.8
10+	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	1.8	1.6	1.7	17.1	45.4	8.8	1.6	1.4	.0	6.4	85.8	85.8
	TOT %	1.8	1.6	1.7	17.1	45.4	8.8	1.6	1.4	.0	6.4	85.8	85.8
TOT OBS													
TOT PCT													
		2.5	2.1	2.1	18.4	51.6	10.9	1.6	1.6	.0	9.1	100.0	964

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED WITH VARYING VALUES OF VISIBILITY													
VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1
	4-10	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	.2	.2
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.2
	4-10	.0	.0	.0	.1	.1	.1	.0	.0	.0	.0	.2	.2
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.1	.1	.1	.0	.0	.0	.2	.5	.5
5<10	0-3	.2	.1	.1	.2	.9	.3	.0	.1	.0	2.1	3.9	3.9
	4-10	.3	.3	.4	.7	3.7	1.7	.0	.2	.0	.0	7.3	7.3
	11-21	.1	.0	.1	.2	.6	.2	.0	.0	.0	.0	1.1	1.1
	22+	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1	.1
	TOT %	.6	.5	.5	1.2	5.2	2.1	.0	.2	.0	2.1	12.4	12.4
10+	0-3	.7	.5	.4	1.2	4.1	1.4	.6	.5	.0	7.7	17.1	17.1
	4-10	1.0	1.3	.6	8.4	27.8	7.6	.9	.7	.0	.0	48.2	48.2
	11-21	.1	.1	.4	6.1	13.3	.9	.1	.0	.0	.0	21.2	21.2
	22+	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0	.5	.5
	TOT %	1.8	1.9	1.4	16.0	45.5	9.9	1.6	1.3	.0	7.7	87.0	87.0
TOT OBS													
TOT PCT													
		2.3	2.3	1.9	17.3	50.9	12.2	1.6	1.5	.0	10.0	100.0	1261

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977

MAY

AREA 0030 ANTOFAGASTA
22.15 71.3W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8) AND
OCCURRENCE OF NH < 5/8 BY HOUR

HR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	.6	1.1	1.1	14.9	33.1	8.8	4.4	.0	.6	.0	64.6	33.4	181
06009	.0	1.1	.5	13.9	28.0	15.5	4.8	.5	.5	.0	74.9	25.1	187
12015	.5	1.4	1.0	18.1	35.2	17.6	8.6	1.9	.5	.0	84.8	15.2	210
18021	.0	1.4	.0	13.4	34.0	13.9	5.7	2.4	1.0	.5	72.2	27.8	209
TOT	2	10	5	119	276	111	47	10	5	1	586	201	787
PCT	.3	1.3	.6	15.1	35.1	14.1	6.0	1.3	.6	.1	74.5	25.5	100.0

TABLE 11

PERCENT FREQUENCY VS BY (NM) BY HOUR

HR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.0	.0	12.2	87.8	288
06009	.0	.2	.0	.7	12.2	86.8	410
12015	.0	.4	.0	.4	14.4	84.9	284
18021	.0	.0	.0	.7	10.8	88.5	305
TOT	0	2	0	6	159	1120	1287
PCT	.0	.2	.0	.5	12.4	87.0	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VS BY (NM) AND/OR
CEILING HGT (FEET, NH > 4/8) BY HOUR

HR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	.6	2.8	18.2	47.7	34.1	176
06009	.0	1.6	16.1	59.1	24.7	186
12015	.5	2.9	21.0	63.8	15.2	210
18021	.0	1.5	15.6	59.8	24.6	199
TOT	2	17	137	447	187	771
PCT	.3	2.2	17.8	58.0	24.3	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
80/84	.0	.0	.0	.0	.0	.1	.0	.0	1	.1
75/79	.0	.0	.0	.1	.0	.4	.2	.0	6	.7
70/74	.0	.0	.0	.2	1.8	.7	.5	.4	30	3.6
65/69	.0	.0	.1	.8	7.3	14.0	5.9	1.4	246	29.6
60/64	.0	.0	.0	1.0	10.7	24.8	17.6	4.6	487	58.6
55/59	.0	.0	.0	.0	.1	2.8	1.2	.5	57	6.9
50/54	.0	.0	.0	.0	.0	.0	.1	.4	4	.5
TOTAL	0	0	1	18	166	354	226	66	831	100.0
PCT	.0	.0	.1	2.2	20.0	42.6	27.2	7.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
.0	.1	.0	.2	.0	.0	.2	.1	.0	.1
.3	.4	.1	.5	2.0	*	.1	.2	.0	.0
.5	.5	.2	8.0	14.5	2.6	.5	1.0	.0	1.9
1.7	1.0	1.0	9.1	31.0	7.4	.3	.7	.0	6.4
.2	.6	.1	.2	3.3	1.1	*	.0	.0	1.0
.0	.0	.0	.0	.5	*	.0	.0	.0	.0
2.8	2.6	1.4	18.1	51.4	11.3	1.3	1.9	.0	9.4

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	84	70	68	63	59	56	52	63.3	729
06009	84	69	66	62	57	55	54	62.1	1436
12015	82	71	67	63	58	55	53	62.8	670
18021	84	75	72	66	61	58	57	65.9	1546
TOT	84	73	69	64	58	56	52	63.7	4381

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.9	16.4	45.9	28.0	7.7	77	207		
06009	.0	1.8	18.2	36.0	32.9	11.1	78	225		
12015	.0	1.4	19.3	40.8	29.8	8.7	77	218		
18021	.0	3.8	28.2	47.4	16.7	3.8	73	209		
TOT	0	19	176	364	232	68	76	859		

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1870-1977

MAY

AREA 0090 ANTOFAGASTA
22.15 71.3W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	77 80	TOT	M FOG	NO FOG
11/13	.0	.0	.0	.1	.0	.0	.0	1	.0	.1
9/10	.0	.0	.2	.0	.0	.0	.0	2	.0	.2
7/8	.0	.0	.2	.0	.3	.1	.0	6	.0	.7
6	.0	.2	.1	.0	.2	.0	.0	5	.0	.6
5	.0	.0	.8	.3	.1	.3	.1	15	.0	1.7
4	.0	.2	.5	.8	.6	.0	.0	18	.0	2.1
3	.0	.1	.7	.6	.8	.2	.0	21	.0	2.4
2	.0	.9	2.6	1.6	.9	.1	.0	48	.0	5.6
1	.0	.3	2.1	1.9	1.0	.3	.0	49	.0	5.7
0	.0	.7	5.9	3.8	.3	.0	.0	93	.0	10.8
-1	.0	1.3	6.8	5.0	.1	.0	.1	114	.0	13.3
-2	.2	1.4	8.6	4.8	.6	.1	.1	136	.0	15.9
-3	.0	2.1	8.5	4.4	.1	.3	.0	133	.0	15.5
-4	.1	1.9	6.4	2.4	.2	.0	.0	95	.0	11.1
-5	.0	1.0	3.8	1.9	.0	.0	.0	58	.0	6.8
-6	.0	.8	2.0	.5	.0	.0	.0	28	.0	3.3
-7/-8	.2	1.0	1.9	.0	.0	.0	.0	27	.0	3.1
-9/-10	.0	.0	.9	.0	.0	.0	.0	8	.0	.9
-14/-16	.1	.0	.0	.0	.0	.0	.0	1	.0	.1
TOTAL	6	99	447	242	47	14	3	858	.0	858
PCT	.7	11.5	52.1	28.2	5.5	1.6	.3	100.0		100.0

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.5	.0	.0	.0	.0	.0	.5	.2	.6	.0	.0	.0	.0	.8
1-2	.2	.2	.0	.0	.0	.0	.5	.3	.5	.0	.0	.0	.0	.8
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.7	.2	.0	.0	.0	.0	1.0	.5	1.1	.0	.0	.0	.0	1.6

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.7	.0	.0	.0	.0	.7	.7	.9	.1	.0	.0	.0	1.7
1-2	.0	1.1	.0	.0	.0	.0	1.1	.7	4.0	1.7	.0	.0	.0	6.4
3-4	.0	.0	.6	.0	.0	.0	.6	.0	3.0	2.2	.0	.0	.0	5.2
5-6	.0	.0	.2	.0	.0	.0	.2	.0	.1	2.0	1.0	.0	.0	3.1
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.6
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	1.9	.9	.0	.0	.0	2.8	1.5	7.9	6.6	1.0	.0	.0	16.9

PERIOD: (OVER-ALL) 1963-1977

MAY

AREA 0030 ANTOFAGASTA
22.15 71.3W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							PCT	SW							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.6	4.4	.2	.0	.0	.0	5.3	.3	2.3	.0	.0	.0	.0	.0	2.7	
1-2	.9	23.9	4.4	.0	.0	.0	29.3	.6	6.1	.6	.0	.0	.0	.0	7.4	
3-4	.0	7.4	6.6	.0	.0	.0	13.9	.0	1.0	.0	.0	.0	.0	.0	1.0	
5-6	.0	1.8	2.6	.0	.0	.0	4.4	.0	1.4	.6	.0	.0	.0	.0	2.0	
7	.0	.0	.7	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	1.5	37.5	14.6	.0	.0	.0	53.6	1.0	10.8	1.3	.0	.0	.0	.0	13.1	

HGT	W							PCT	NW							PCT	TOTAL PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+			
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1-2	.3	.6	.0	.0	.0	.0	.9	.4	.4	.0	.0	.0	.0	.0	.8	.8	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	.3	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.3	.6	.0	.0	.0	.0	.9	.4	.7	.0	.0	.0	.0	.0	1.1	90.9	

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	12.4	8.9	.3	.0	.0	.0	21.7	
1-2	3.8	36.3	6.7	.0	.0	.0	46.8	
3-4	.0	11.5	9.2	.0	.0	.0	20.7	
5-6	.0	3.2	5.4	1.0	.0	.0	9.6	
7	.0	.0	1.3	.0	.0	.0	1.3	
8-9	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	16.2	59.9	22.9	1.0	.0	.0	100.0	314

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	3.5	6.5	6.5	6.5	1.1	1.1	.2	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	161	3
6-7	.2	1.9	9.3	10.2	4.1	1.1	.8	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	174	5
8-9	.0	.6	2.7	6.1	3.2	2.4	.6	.3	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	105	6
10-11	.0	.5	.8	2.1	3.5	.6	1.0	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	59	7
12-13	.0	.0	.2	1.9	2.2	.5	.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	33	7
>13	.0	.0	.0	.5	.2	.2	.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8	8
INDET	4.6	2.1	2.9	3.5	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	87	3
TOTAL	52	73	140	193	95	37	18	12	6	1	0	0	0	0	0	0	0	0	0	627	5
PCT	8.3	11.6	22.3	30.8	15.2	5.9	2.9	1.9	1.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1855-1977

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TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	.0	.0	3.1	.0	.0	.0	.0	3.1	.0	.0	3.1	.0	.0	.0	93.8
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5	.0	.0	.0	96.5
E	2.8	.0	.0	.0	.0	.0	.0	2.8	.0	.0	.0	.0	.0	.0	97.2
SE	.1	.7	1.1	.0	.0	.0	.0	1.9	.7	.5	.1	.0	.0	.0	96.7
S	.0	.3	.3	.0	.0	.0	.0	.6	.5	.0	.1	.0	.0	.2	98.2
SW	1.0	.3	.0	.0	.0	.0	.0	1.3	.0	.0	.3	.0	3.6	.0	94.9
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.2	.0	.0	.0	93.8
NW	.0	.0	.0	.0	.0	.0	.0	.0	5.4	.0	.0	.0	5.4	.0	89.2
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	1.2	.0	.0	.0	.0	1.2	1.2	.0	2.4	.0	3.6	.0	91.6
TOT PCT	.2	.3	.6	.0	.0	.0	.0	1.0	.6	.1	.7	.0	.9	.1	96.6
TOT OBS:	1074														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
0000	.0	.4	.8	.0	.0	.0	.0	1.2	1.6	.0	.8	.0	.0	.0	96.5
0600	.0	.6	.9	.0	.0	.0	.0	1.5	.0	.3	1.2	.0	.9	.0	96.1
1200	.7	.0	.4	.0	.0	.0	.0	1.1	.4	.0	.7	.0	1.5	.4	96.0
1800	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	1.2	.0	1.2	.0	97.3
TOT PCT	.2	.3	.5	.0	.0	.0	.0	1.0	.5	.1	1.0	.0	.9	.1	96.4
TOT OBS:	1122														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21	
N	1.8	2.6	.4	.0	.0	.0		4.8	5.4	3.7	.0	4.7	8.4	5.1	.0	3.7	4.7	
NE	1.2	1.6	.2	.0	.0	.0		3.0	4.9	1.1	.0	2.5	5.1	4.2	10.0	2.8	2.6	
E	1.2	1.5	.2	.0	.0	.0		2.9	5.1	2.2	.0	2.4	3.1	4.8	5.0	3.0	2.1	
SE	3.2	10.0	5.2	.5	.0	.0		18.9	8.8	16.7	6.7	16.4	18.4	21.0	6.3	22.1	16.4	
S	8.1	24.6	12.0	1.0	.0	.0		45.7	8.5	50.2	78.3	44.8	39.9	43.9	65.0	46.3	47.8	
SW	2.5	5.3	1.5	.1	.0	.0		9.4	6.9	11.6	15.0	9.5	7.0	7.1	8.8	9.4	12.9	
W	.8	1.2	.1	.0	.0	.0		2.0	4.5	2.2	.0	2.2	1.5	1.3	.0	2.5	2.3	
NW	1.2	1.6	.3	.0	.0	.0		3.0	5.4	3.4	.0	3.5	2.7	2.0	.0	2.5	5.7	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	10.2							10.2	.0	.0	.0	14.1	13.8	10.6	5.0	7.8	5.5	
TOT OBS	1390	2235	912	77	1	0	4615		7.0		752	15	875	630	677	20	1263	383
TOT PCT	30.1	48.4	19.8	1.7	.0	.0		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40					00	03	09	18
N	3.5	1.2	.1	.0	.0				3.7	6.2	4.9	3.9
NE	2.3	.6	.0	.0	.0				1.0	3.6	4.4	2.7
E	2.2	.7	.0	.0	.0				2.1	2.7	4.8	2.8
SE	8.1	8.6	2.1	.1	.0				16.5	17.3	20.6	20.8
S	20.0	20.1	4.5	.2	.0				50.7	42.7	44.5	46.7
SW	5.5	3.3	.5	.0	.0				11.7	8.4	7.1	10.2
W	1.8	.2	.0	.0	.0				2.1	1.9	1.3	2.4
NW	2.3	.6	.1	.0	.0				3.3	3.2	2.0	3.3
VAR	.0	.0	.0	.0	.0				.0	.0	.0	.0
CALM	10.2								8.9	14.0	10.5	7.2
TOT OBS	2629	1635	338	13	0	4615			767	1505	697	1646
TOT PCT	57.0	35.4	7.3	.3	.0				100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1855-1977

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-23	34-47					
0000	8.9	16.4	49.2	23.3	2.2	.0	.0	7.7	100.0	767	
0600	14.0	21.5	45.6	17.7	1.2	.0	.0	6.3	100.0	1505	
1200	10.5	19.1	50.1	18.9	1.4	.0	.0	6.9	100.0	697	
1800	7.2	20.5	50.0	20.3	1.9	.1	.0	7.3	100.0	1646	
TOT	470	920	2235	912	77	1	0	7.0		4615	
PCT	10.2	19.9	48.4	19.8	1.7	*	.0	100.0			

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 10	TOTAL OBS	MEAN CLOUD COVER
N	.1	.1	.1	2.2		7.4
NE	.1	.4	.4	1.6		6.8
E	.2	.4	.7	.9		5.9
SE	1.3	2.1	6.5	7.4		6.3
S	8.5	4.1	15.6	26.5		6.1
SW	1.8	1.1	1.8	3.8		5.5
W	.3	.4	.2	1.2		6.0
NW	.1	*	.2	1.4		7.2
VAR	.0	.0	.0	.0		.0
CALM	.9	1.1	1.4	5.2		6.4
TOT OBS	107	78	217	405	807	6.1
TOT PCT	13.3	9.7	26.9	50.2	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.0	.0	.4	1.6	.1	.0	.0	.0	.0	.3	
NE	.0	.0	.0	.1	.8	.6	.1	.2	.0	.0	.5	
E	.0	.1	.0	.2	.3	.2	.1	.0	.1	.0	1.0	
SE	.0	.1	.1	2.1	6.1	3.6	.7	.1	.1	.0	4.5	
S	.1	.1	.2	6.8	17.9	10.5	3.3	.1	.0	.5	15.1	
SW	.1	.0	.1	1.2	3.0	.6	.1	.0	.1	.0	3.3	
W	.1	.0	.0	.4	.5	.5	.0	.0	.0	.0	.7	
NW	.0	.0	.0	.2	.7	.5	.1	.0	.0	.0	.3	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	1.0	2.6	2.4	.5	.0	.0	.0	2.1	
TOT OBS	2	2	4	101	271	153	39	4	3	4	224	807
TOT PCT	.2	.2	.5	12.5	33.6	19.0	4.8	.5	.4	.5	27.8	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.7	.7	.8	.8	.8	.8	.8	.8
>4000	1.1	1.2	1.3	1.3	1.3	1.3	1.3	1.3
>3500	5.4	5.8	5.9	5.9	5.9	5.9	5.9	5.9
>2000	22.7	24.8	25.0	25.0	25.0	25.0	25.0	25.0
>1000	53.3	58.9	59.0	59.0	59.0	59.0	59.0	59.0
>600	64.1	71.2	71.7	71.7	71.7	71.7	71.7	71.7
>300	64.7	71.8	72.3	72.3	72.3	72.3	72.3	72.3
>150	64.8	72.0	72.5	72.5	72.5	72.5	72.5	72.5
>0	64.8	72.0	72.5	72.6	72.7	72.7	72.7	72.7
TOTAL	537	597	601	602	603	603	603	603

TOTAL NUMBER OF OBSI 829

PCT FREQ NH <5/8 27.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
5.7	3.8	5.4	8.0	4.9	5.0	9.3	11.8	45.9	.2	901

PERIOD: (PRIMARY) 1908-1977
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
2<5	PCP	.0	.0	.0	.1	.1	.1	.0	.0	.0	.0	.0	
	NO PCP	.3	.0	.1	.0	.5	.5	.4	.1	.0	.1	2.1	
	TOT %	.3	.0	.1	.1	.6	.6	.4	.1	.0	.1	2.4	
5<10	PCP	.1	.0	.1	.1	.1	.0	.0	.0	.0	.0	.0	
	NO PCP	.4	.5	.2	1.5	6.3	.9	.3	.5	.0	1.8	12.2	
	TOT %	.5	.5	.2	1.7	6.4	.9	.3	.3	.0	1.8	12.6	
10+	PCP	.0	.0	.0	.1	.2	.0	.0	.0	.0	.1	.4	
	NO PCP	2.1	2.1	2.2	15.2	46.5	7.6	1.8	1.3	.0	5.8	84.5	
	TOT %	2.1	2.1	2.2	15.2	46.6	7.7	1.8	1.3	.0	5.9	84.8	
TOT OBS		1074											
TOT PCT		3.0	2.7	2.5	17.0	53.6	9.2	2.6	1.7	.0	7.7	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
	4-10	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	
2<5	0-3	.0	.0	.1	.0	.1	.1	.0	.0	.0	.1	.3	
	4-10	.2	.0	.0	.1	.2	.5	.2	.1	.0	.0	1.4	
	11-21	.0	.0	.0	.1	.2	.0	.1	.0	.0	.0	.3	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.2	.0	.1	.1	.4	.6	.3	.1	.0	.1	2.1	
5<10	0-3	.3	.2	.0	.3	1.0	.1	.1	.2	.0	2.0	4.1	
	4-10	.7	.4	.2	.9	3.1	.8	.3	.3	.0	.0	6.5	
	11-21	.1	.0	.1	.3	1.6	.0	.0	.0	.0	.0	2.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	1.0	.6	.2	1.5	5.6	.9	.3	.4	.0	2.0	12.6	
10+	0-3	.8	.8	.5	1.0	4.1	1.1	.4	.4	.0	8.6	17.7	
	4-10	2.0	1.3	1.3	7.2	23.2	4.9	1.2	1.4	.0	.0	42.5	
	11-21	.1	.2	.1	4.7	16.3	2.1	.0	.0	.0	.0	23.5	
	22+	.0	.0	.0	.2	1.0	.1	.0	.0	.0	.0	1.3	
	TOT %	2.9	2.2	2.0	13.1	44.6	8.2	1.7	1.8	.0	8.6	85.0	
TOT OBS		1449											
TOT PCT		4.2	2.9	2.3	14.8	50.7	9.7	2.4	2.3	.0	10.8	100.0	

JUNE

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1855-1977AREA 0030 ANTDFAGASTA
22.25 71.5W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM $\geq 4/8$) AND
OCCURRENCE OF NM $< 3/8$ BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM $< 3/8$ ANY HGT	TOTAL OBS
00003	1.0	.0	.0	12.8	28.2	19.0	4.6	.5	.5	1.0	67.7	32.3	195
06009	.0	.0	.4	11.7	35.4	20.6	6.3	.0	.0	.9	75.3	24.7	223
12015	.0	.4	.4	16.2	38.2	17.1	3.5	1.3	.4	.0	77.6	22.4	228
18021	.0	.5	1.4	8.2	29.3	17.3	3.8	.0	.5	.0	61.1	38.9	208
TOT	2	2	5	105	282	158	39	4	3	4	604	250	854
PCT	.2	.2	.6	12.3	33.0	18.5	4.6	.5	.4	.5	70.7	29.3	100.0

TABLE 11

PERCENT FREQUENCY VS BY (NM) BY HOUR

HOUR (GMT)	$< 1/2$	$1/2 < 1$	$1 < 2$	$2 < 5$	$5 < 10$	$10+$	TOTAL OBS
00003	.0	.3	.3	2.7	14.5	82.1	330
06009	.0	.6	.2	4.0	14.1	81.1	503
12015	.0	.3	.3	1.2	12.6	85.6	326
18021	.0	.0	.0	1.8	9.4	88.8	339
TOT	0	5	3	39	192	1259	1498
PCT	.0	.3	.2	2.6	12.8	84.0	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VS BY (NM) AND/OR
CEILING HGT (FEET, NM $\geq 4/8$) BY HOUR

HOUR (GMT)	< 150 < 500	$600 < 1$	$1000 < 5$	$1000+$ AND 5+	NM $< 5/8$ AND 5+	TOTAL OBS
00003	1.1	1.1	14.7	54.2	31.1	190
06009	.0	.5	12.8	64.7	22.5	218
12015	.0	.9	18.0	62.2	19.8	222
18021	.0	2.0	10.6	53.3	36.2	199
TOT	2	9	117	488	224	829
PCT	.2	1.1	14.1	58.9	27.0	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
75/79	.0	.0	.0	.1	.0	.1	.0	.0	2	.2
70/74	.0	.0	.0	.2	.2	.6	.0	.0	10	1.1
65/69	.0	.0	.0	.3	3.4	4.3	3.0	1.2	114	12.2
60/64	.0	.0	.0	1.2	12.5	26.4	16.4	3.7	564	60.2
55/59	.0	.0	.0	.1	1.8	10.7	10.0	3.0	240	25.6
50/54	.0	.0	.0	.0	.0	.2	.5	.0	7	.7
TOTAL	0	0	0	18	168	396	281	74	937	100.0
PCT	.0	.0	.0	1.9	17.9	42.3	30.0	7.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
.0	.0	.0	.3	.4	.1	.2	.0	.0	.0
.1	.4	.2	3.7	5.3	.9	.5	.5	.0	.6
1.8	1.3	1.2	11.4	30.4	5.6	1.6	1.3	.0	5.7
1.4	1.1	1.0	1.5	15.1	2.9	.4	.4	.0	1.8
.1	.2	.0	.0	.4	.0	.0	.0	.0	.0
3.4	3.0	2.4	16.9	51.5	9.6	2.7	2.1	.0	8.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	80	67	65	61	56	53	51	60.8	771
06009	68	65	64	60	55	54	49	59.7	1520
12015	82	67	65	60	56	53	51	60.3	702
18021	79	73	69	63	58	55	52	63.0	1615
TOT	82	70	66	61	56	54	49	61.1	4608

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.9	19.1	40.4	29.4	10.2	78	235
06009	.0	.7	10.5	38.8	41.6	8.4	79	286
12015	.0	2.5	16.1	44.1	28.8	8.5	77	236
18021	.0	3.5	25.1	43.2	24.2	4.0	75	227
TOT	0	18	170	408	311	77	77	984

PERIOD: (PRIMARY) 1908-1977
(OVER-ALL) 1855-1977

JUNE

TABLE 17

AREA 0030 ANTOFAGASTA
22.25 71.5W

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	77 80	TOT	W FOG	NO FOG
14/16	.0	.0	.0	.0	.0	.1	.0	1	.0	.1
9/10	.0	.0	.1	.0	.0	.1	.0	2	.0	.2
7/8	.0	.0	.0	.1	.0	.1	.1	3	.0	.3
6	.0	.0	.0	.1	.3	.0	.0	4	.0	.4
5	.1	.0	.4	.3	.1	.0	.0	9	.1	.8
4	.0	.1	.5	.7	.2	.0	.0	15	.0	1.5
3	.0	.1	.8	1.3	.0	.1	.0	23	.1	2.2
2	.1	.6	2.3	1.2	.4	.0	.0	48	.0	4.9
1	.2	1.7	2.4	1.0	.1	.0	.0	54	.0	5.5
0	.4	3.5	6.1	2.0	.1	.0	.0	120	.1	12.0
-1	.0	4.7	6.2	1.8	.1	.0	.0	126	.0	12.8
-2	.9	5.4	10.4	1.4	.0	.0	.0	177	.0	17.9
-3	.0	6.3	8.8	.6	.0	.0	.0	155	.0	15.7
-4	.7	5.0	5.9	.5	.0	.0	.0	119	.0	12.0
-5	.6	3.6	2.7	.5	.0	.0	.0	74	.0	7.5
-6	.5	.8	1.0	.1	.0	.0	.0	24	.0	2.4
-7/-8	.5	1.6	.8	.0	.0	.0	.0	29	.0	2.9
-9/-10	.0	.4	.1	.0	.0	.0	.0	5	.1	.4
TOTAL	40		480		13		1	988	4	984
PCT	4.0	33.8	48.6	11.7	1.3	.4	.1	100.0	.4	99.6

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.2	.2	.0	.0	.0	.0	.4	.6	.1	.0	.0	.0	.0	.6
1-2	.3	1.3	.0	.0	.0	.0	1.6	.0	.9	.1	.0	.0	.0	1.0
3-4	.0	.3	.2	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.2	.0	.0	.0	.2	.0	.0	.1	.0	.0	.0	.1
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.4	1.8	.4	.0	.0	.0	2.6	.6	.9	.2	.0	.0	.0	1.7

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.2	.5	.0	.0	.0	.0	.7	.8	1.5	.0	.0	.0	.0	2.3
1-2	.0	.2	.4	.0	.0	.0	.6	.3	2.9	1.4	.0	.0	.0	4.6
3-4	.0	.0	.0	.0	.0	.0	.0	.0	4.6	2.0	.0	.0	.0	6.6
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.9	2.5	.0	.0	.0	3.4
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.3	.0	.0	.9
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.2	.7	.4	.0	.0	.0	1.3	1.1	9.9	6.6	.3	.0	.0	17.8

PERIOD: (OVER-ALL) 1963-1977

JUNE

AREA 0030 ANTOFAGASTA
22.25 71.5W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							PCT	SW							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	1.6	3.0	.5	.0	.0	.0		5.1	.6	1.1	.0	.0	.0	.0		1.6
1-2	.3	16.5	2.8	.0	.0	.0		19.6	.8	2.8	.3	.0	.0	.0		3.9
3-4	.0	.0	9.9	.0	.0	.0		15.5	.0	.6	.6	.0	.0	.0		1.3
5-6	.0	.0	8.0	.3	.0	.0		9.2	.0	.0	.6	.0	.0	.0		.6
7	.0	.0	1.8	.5	.0	.0		2.8	.0	.1	.0	.0	.0	.0		.2
8-9	.0	.0	1.0	.8	.0	.0		1.8	.0	.0	.0	.0	.0	.0		.0
10-11	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
12	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
13-16	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
17-19	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
20-22	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
23-25	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
26-32	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
33-40	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
41-48	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
49-60	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
61-70	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
71-86	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
87+	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0
TOT PCT	1.9	26.8	23.7	1.6	.0	.0		54.1	1.3	4.6	1.6	.2	.0	.0		7.7

HGT	W							PCT	NW							PCT	TOTAL PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+			
<1	.3	.0	.0	.0	.0	.0		.3	.3	.0	.0	.0	.0	.0		.3	
1-2	.5	1.8	.0	.0	.0	.0		2.3	.0	1.6	.0	.0	.0	.0		1.6	
3-4	.0	.2	.0	.0	.0	.0		.2	.0	.0	.1	.0	.0	.0		.1	
5-6	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
7	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
8-9	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
10-11	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
12	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
13-16	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
17-19	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
20-22	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
23-25	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
26-32	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
33-40	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
41-48	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
49-60	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
61-70	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
71-86	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
87+	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0		.0	
TOT PCT	.8	2.0	.0	.0	.0	.0		2.8	.3	1.6	.1	.0	.0	.0		2.0	89.9

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	15.8	6.2	.5	.0	.0	.0	22.5	
1-2	2.5	27.7	5.0	.0	.0	.0	35.1	
3-4	.0	11.4	12.1	.0	.0	.0	23.5	
5-6	.0	1.7	11.1	.2	.0	.0	13.1	
7	.0	.5	2.5	.7	.0	.0	3.7	
8-9	.0	.0	1.0	1.0	.0	.0	2.0	
10-11	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	18.3	47.5	32.2	2.0	.0	.0	100.0	404

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	3.6	8.4	9.7	4.5	1.4	.4	.3	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	204	3
6-7	.1	1.3	6.6	11.2	4.5	2.2	1.7	.7	1.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	210	6
8-9	.1	.7	4.3	3.9	4.1	2.9	1.4	.7	1.3	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	144	7
10-11	.0	.6	.6	2.0	1.1	1.3	1.5	1.3	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	62	8
12-13	.0	.0	.3	.3	.7	1.1	.1	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	22	8
>13	.0	.0	.0	.1	.0	.1	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	8
INDET	3.2	2.0	1.7	.8	1.1	.3	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	68	3
TOTAL	51	92	165	163	92	60	40	24	21	1	5	0	0	0	0	0	0	0	0	714	5
PCT	7.1	12.9	23.1	22.8	12.9	8.4	5.6	3.4	2.9	.1	.7	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1976
(OVER-ALL) 1870-1976

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TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WNO DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SNOW	ND SIG WEA
N	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	1.2	.6	1.4	.0	.0	.0	.0	2.6	1.8	.0	.8	.0	.6	.0	94.3
S	.0	.2	.5	.0	.0	.0	.0	.7	.5	.0	.3	.0	.5	.1	97.8
SW	.0	.0	1.8	.0	.0	.0	.0	1.8	.0	.0	.9	.0	1.4	.2	95.7
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.5	.0	90.5
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.2	.0	.0	.0	94.8
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	1.3	.0	.0	.0	.0	1.3	1.3	.0	.0	.0	4.0	.0	93.3
TOT PCT	.2	.2	.8	.0	.0	.0	.0	1.1	.7	.0	.5	.0	1.0	.1	96.6
TOT OBS:	1005														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

PRECIPITATION TYPE										OTHER WEATHER PHENOMENA					
HOUR (GMT)	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SNOW	ND SIG WEA
00003	.4	.0	.0	.0	.0	.0	.0	.4	.0	.0	.9	.0	1.3	.0	97.3
06009	.0	.3	1.4	.0	.0	.0	.0	1.7	.7	.0	.3	.0	1.0	.0	96.3
12015	.4	.0	1.5	.0	.0	.0	.0	1.5	1.5	.0	.8	.0	1.1	.0	95.1
18021	.0	.4	.0	.0	.0	.0	.0	.4	.8	.0	.0	.0	.4	.4	97.9
TOT PCT	.2	.2	.8	.0	.0	.0	.0	1.1	.8	.0	.5	.0	1.0	.1	96.6
TOT OBS:	1025														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	00	03					06	09	12	15	18	21		
N	2.1	3.5	.3	*	.0	.0	5.9	5.2	4.2	6.7	8.3	9.4	6.4	2.7	4.1	3.5			
NE	1.0	.7	.1	.0	*.0	.0	1.8	4.0	1.1	3.8	2.4	3.1	2.0	2.7	1.4	.5			
E	1.1	1.4	.3	.0	*.0	.0	2.8	5.8	1.6	.0	2.6	4.3	5.2	1.4	2.4	1.0			
SE	3.1	9.1	6.6	.9	.1	.0	19.8	9.8	18.0	13.5	16.5	19.0	24.3	17.6	20.7	21.0			
S	8.3	22.0	12.4	1.7	.1	.0	44.6	9.0	49.3	29.8	44.0	38.1	39.3	49.3	46.6	49.9			
SW	2.6	5.1	1.0	.1	.0	.0	8.7	6.3	11.2	22.1	7.4	6.0	7.0	14.2	9.3	11.2			
W	1.0	1.2	.2	.0	.0	.0	2.4	4.8	2.8	3.8	3.0	2.2	1.4	6.8	2.0	2.7			
NW	1.6	1.9	.3	*.0	.0	.0	3.8	5.5	2.6	1.0	3.7	4.7	3.0	.0	4.3	5.1			
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0			
CALM	10.2						10.2	.0	9.1	19.2	12.2	13.3	11.5	5.4	9.1	5.1			
TOT OBS	1742	2512	1184	158	8	0	5604		7.4	864	26	1033	767	815	37	1531			
TOT PCT	31.1	44.8	21.1	2.8	.1	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0			

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00	06	12	18	21
N	4.5	1.4	*	*	.0		5.9	5.2	4.3	8.8	6.2	4.0	
NE	1.5	.3	.0	.0	.0		1.8	4.0	1.2	2.7	2.1	1.1	
E	2.0	.7	.1	.0	.0		2.8	5.8	1.6	3.3	5.0	2.0	
SE	7.3	9.4	2.8	.3	.0		19.8	9.8	17.9	17.6	24.0	20.8	
S	19.4	19.2	5.6	.4	.0		44.6	9.0	48.7	41.5	38.7	47.5	
SW	5.5	2.9	.3	*	.0		8.7	6.3	11.5	6.8	7.3	9.8	
W	1.9	.4	*	.0	.0		2.4	4.8	2.9	2.6	1.6	2.2	
NW	2.7	1.0	.1	.0	.0		3.8	5.5	2.6	4.1	2.8	4.5	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	10.2						10.2	.0	9.4	12.7	11.3	8.1	
TOT OBS	3073	1983	505	43	0	5604		7.4	890	1800	852	2062	
TOT PCT	54.8	35.4	9.0	.8	.0		100.0		100.0	100.0	100.0	100.0	

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PERIOD: (PRIMARY) 1907-1976
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47					
0000Z	9.4	19.8	44.2	22.9	3.6	.1	.0	7.8	100.0	890	
0600Z	12.7	21.7	45.7	17.4	2.3	.2	.0	6.7	100.0	1800	
1200Z	11.3	19.7	44.5	21.8	2.7	.0	.0	7.4	100.0	852	
1800Z	8.1	21.0	44.5	23.3	3.0	.1	.0	7.7	100.0	2062	
TOT	574	1168	2512	1184	158	8	0	7.4		5604	
PCT	10.2	20.8	44.8	21.1	2.8	.1	.0	100.0			

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 10	TOTAL	MEAN CLOUD COVER
N	.6	.2	.8	2.0	6.2	
NE	.2	.2	.2	.3	5.0	
E	.0	.0	.2	1.0	7.7	
SE	1.0	1.0	5.1	11.4	6.9	
S	7.2	5.0	12.7	28.0	6.2	
SW	1.3	1.0	2.1	6.8	6.5	
W	.5	.0	.2	1.1	6.0	
NW	.6	.1	.0	.8	4.9	
VAR	.0	.0	.0	.0	.0	
CALM	.4	.5	.5	6.1	7.1	
TOT OBS	89	61	166	443	759	6.4
TOT PCT	11.7	8.0	21.9	58.4	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
	149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
N	.0	.0	.0	.9	.8	.5	.3	.0	.0	.3	.9	
NE	.0	.0	.0	.2	.1	.1	.0	.0	.0	.0	.4	
E	.0	.0	.0	.1	.6	.4	.0	.0	.0	.0	.1	
SE	.0	.2	.4	2.9	6.5	4.0	1.4	.5	.0	.0	2.8	
S	.1	.4	.3	7.5	22.2	7.5	.4	.7	.3	.3	14.2	
SW	.0	.0	.0	2.5	3.7	1.7	.4	.1	.1	.0	2.6	
W	.0	.0	.0	.1	.8	.3	.0	.0	.0	.0	.5	
NW	.0	.0	.0	.3	.5	.1	.0	.0	.0	.0	.7	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	1.1	4.1	1.2	.1	.0	.0	.0	1.1	
TOT OBS	1	4	6	118	298	120	19	10	3	4	176	759
TOT PCT	.1	.5	.8	15.5	39.3	15.8	2.5	1.3	.4	.5	23.2	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	.6	.9	.9	.9	.9	.9	.9	.9
>5000	1.8	2.2	2.2	2.2	2.2	2.2	2.2	2.2
>3500	4.1	4.8	4.8	4.8	4.8	4.8	4.8	4.8
>2000	18.3	20.9	20.9	20.9	20.9	20.9	20.9	20.9
>1000	52.2	59.7	59.8	59.8	59.8	59.8	59.8	59.8
>600	64.8	74.6	74.9	74.9	75.0	75.0	75.0	75.0
>300	65.6	75.4	75.6	75.6	75.8	75.8	75.8	75.8
>150	66.0	75.9	76.2	76.2	76.3	76.3	76.3	76.3
>0	66.0	76.0	76.3	76.3	76.4	76.4	76.4	76.4
TOTAL	512	590	592	592	593	593	593	593

TOTAL NUMBER OF OBS: 776

PCT FREQ NH <5/8: 23.6

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
5.7	3.7	5.6	4.9	4.1	3.4	9.1	10.4	53.0	.1	858

PERIOD: (PRIMARY) 1907-1976
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF PRECIPITATION WITH VARYING VALUES OF VISIBILITY												
VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	PCP	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1
	NO PCP	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1
	TOT %	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.2
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1
	TOT %	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.1	.0	.0	.1	.2	.1	.0	.1	.0	.0	.6
	TOT %	.1	.0	.0	.1	.2	.1	.0	.1	.0	.0	.6
5<10	PCP	.0	.0	.0	.2	.1	.1	.0	.0	.0	.0	.4
	NO PCP	.7	.1	.3	1.6	5.5	2.1	.4	.3	.0	2.2	13.6
	TOT %	.7	.1	.3	2.0	5.6	2.2	.4	.3	.0	2.2	14.0
10+	PCP	.0	.0	.0	.1	.3	.1	.0	.0	.0	.1	.6
	NO PCP	3.3	1.0	1.0	14.2	48.2	8.6	1.6	1.5	.0	5.2	84.5
	TOT %	3.3	1.0	1.0	14.3	48.5	8.7	1.6	1.5	.0	5.3	85.1
TOT OBS												1005
TOT PCT												4.2 1.1 1.3 16.6 54.4 11.0 2.1 1.9 .0 7.5 100.0

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED WITH VARYING VALUES OF VISIBILITY												
VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	0-3	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1
	4-10	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.2
1<2	0-3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1
2<5	0-3	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1
	4-10	.1	.0	.0	.3	.1	.0	.0	.2	.0	.0	.7
	11-21	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.1	.0	.0	.3	.2	.1	.0	.2	.0	.0	.8
5<10	0-3	.4	.0	.1	.1	.9	.4	.2	.1	.0	2.3	4.4
	4-10	.6	.1	.2	1.3	3.3	1.5	.2	.3	.0	.0	7.5
	11-21	.2	.0	.0	.7	.8	.0	.0	.0	.0	.0	1.6
	22+	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3
	TOT %	1.1	.1	.3	2.1	5.3	1.9	.4	.4	.0	2.3	13.7
10+	0-3	.7	.3	.2	.8	4.2	1.0	.2	.6	.0	7.6	15.6
	4-10	3.1	.9	.6	6.3	23.1	6.8	1.3	1.2	.0	.0	43.3
	11-21	.1	.1	.2	5.9	16.8	1.3	.0	.2	.0	.0	24.6
	22+	.0	.0	.0	.1	1.5	.1	.0	.0	.0	.0	1.7
	TOT %	3.9	1.4	1.0	13.1	45.6	9.2	1.5	1.9	.0	7.6	85.2
TOT OBS												1331
TOT PCT												5.1 1.5 1.3 15.5 51.1 11.2 2.0 2.5 .0 9.8 100.0

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PERIOD: (PRIMARY) 1907-1976
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM $\geq 4/8$) AND
OCCURRENCE OF NM $\leq 5/8$ BY HOUR

HOURL (GMT)	0/0 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM $\leq 5/8$ ANY HGT	TOTAL DBS
00003	.0	.6	1.2	10.4	36.4	13.9	1.7	1.2	1.2	.6	67.1	32.9	173
06009	.5	.0	.5	17.1	37.0	17.1	2.3	1.4	.0	.0	75.9	24.1	216
12015	.0	1.4	.5	16.7	41.2	14.0	3.6	1.4	.5	.5	79.6	20.4	221
18021	.0	.0	1.1	13.8	36.0	17.5	2.1	1.1	.0	1.1	72.5	27.5	189
TOT	1	4	6	118	302	125	20	10	3	4	593	206	799
PCT	.1	.5	.8	14.8	37.8	15.6	2.5	1.3	.4	.5	74.2	25.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL DBS
00003	.0	.0	.4	1.1	13.5	85.1	282
06009	.0	.2	.0	.7	16.7	82.4	437
12015	.0	.3	.0	.6	12.7	86.3	322
18021	.0	.0	.0	1.0	12.9	86.1	310
TOT	0	2	1	11	192	1145	1351
PCT	.0	.1	.1	.8	14.2	84.8	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM $\geq 4/8$) BY HOUR

HOURL (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NM $\leq 5/8$ AND 5+	TOTAL DBS
00003	.0	1.8	13.2	56.9	29.9	167
06009	.5	.9	18.5	59.2	22.3	211
12015	.0	2.3	19.5	62.3	18.1	215
18021	.0	1.1	15.8	59.6	24.6	183
TOT	1	12	132	463	181	776
PCT	.1	1.5	17.0	59.7	23.3	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL DBS	PCT FREQ
70/74	.0	.0	.0	.3	.1	.0	.0	.0	4	.4
65/69	.0	.0	.1	.1	1.8	1.6	.3	.0	37	3.9
60/64	.0	.0	.3	1.1	12.5	20.9	8.7	1.3	426	44.8
55/59	.0	.0	.0	.6	6.6	22.4	16.0	3.3	465	48.9
50/54	.0	.0	.0	.0	.0	.5	1.5	.0	19	2.0
TOTAL	0	0	4	20	200	432	252	43	951	100.0
PCT	.0	.0	.4	2.1	21.0	45.4	26.5	4.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.1	.2	.0	.0	.1	.0	.0
.1	.0	.0	.3	2.6	.4	.0	.1	.0	.4
1.2	.7	.7	10.1	21.5	5.5	.5	.9	.0	3.7
2.3	.8	.7	6.5	26.6	6.3	1.3	.6	.0	3.8
.3	.0	.0	.2	1.4	.1	.0	.1	.0	.0
3.9	1.5	1.4	17.2	52.3	12.3	1.8	1.7	.0	7.9

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL DBS
00003	69	64	63	59	55	54	46	59.1	885
06009	67	63	62	58	54	53	50	58.3	1806
12015	73	66	63	59	55	53	51	58.8	846
18021	75	71	67	61	57	54	52	61.4	2000
TOT	75	68	65	59	55	54	46	59.6	5537

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL DBS
00003	.0	.9	20.0	46.2	29.3	3.6	76	225		
06009	.0	2.5	12.3	45.3	34.4	5.6	78	285		
12015	.0	2.5	20.7	45.2	26.6	5.0	76	241		
18021	.0	4.1	32.4	47.9	12.3	3.2	72	219		
TOT	0	24	201	447	255	43	76	970		

JULY

PERIOD: (PRIMARY) 1907-1976
(OVER-ALL) 1870-1976

TABLE 17

AREA 0030 ANTOFAGASTA
22.05 71.5WPCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	63 66	69 72	73 76	TOT	W FOG	WD FOG
9/10	.0	.0	.1	.1	.0	.1	.0	3	.0	.3
7/8	.0	.0	.0	.1	.2	.3	.1	7	.0	.8
6	.0	.0	.1	.2	.1	.0	.0	4	.0	.4
5	.0	.2	.3	.2	.3	.3	.1	14	.0	1.5
4	.0	.1	.3	.9	.3	.1	.0	18	.0	1.9
3	.0	.1	.4	1.6	.8	.0	.0	27	.0	2.9
2	.0	.2	1.5	1.9	.3	.0	.0	37	.0	4.0
1	.0	.2	2.5	3.3	1.0	.0	.0	65	.0	7.0
0	.1	.6	6.2	5.9	.3	.0	.0	123	.0	13.2
-1	.0	.9	7.3	3.8	.2	.0	.0	113	.0	12.1
-2	.1	2.6	9.7	4.4	.0	.0	.0	156	.2	16.5
-3	.1	2.4	11.1	2.7	.2	.0	.0	153	.1	16.3
-4	.0	1.2	7.2	1.6	.0	.0	.0	93	.0	10.0
-5	.1	1.5	4.0	1.4	.0	.0	.0	65	.0	7.0
-6	.0	1.4	1.6	.2	.1	.0	.0	31	.0	3.3
-7/-8	.0	1.1	1.1	.2	.0	.0	.0	22	.1	2.3
TOTAL	4	116	266	38	8	2		931	.4	99.6
PCT	.4	12.5	53.4	28.6	4.1	.9	.2	100.0	.4	99.6

PERIOD: (OVER-ALL) 1963-1976

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.5	.2	.0	.0	.0	.0	.9	.0	.3	.1	.0	.0	.0	.4
1-2	.3	1.6	.0	.0	.0	.0	1.8	.0	.1	.0	.0	.0	.0	.1
3-4	.3	.3	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	1.0	2.0	.2	.0	.0	.0	3.2	.0	.4	.1	.0	.0	.0	.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.5	.0	.0	.0	.0	.0	.5	.4	.7	.0	.0	.0	.0	1.1
1-2	.0	.2	.0	.0	.0	.0	.2	.0	3.0	1.7	.0	.0	.0	4.7
3-4	.0	.0	.0	.0	.0	.0	.0	.0	2.6	3.4	.0	.0	.0	5.9
5-6	.0	.0	.3	.0	.0	.0	.3	.0	.8	3.4	.0	.0	.0	4.3
7	.0	.0	.0	.0	.0	.0	.0	.0	.3	1.3	.0	.0	.0	1.6
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	.2	.3	.0	.0	.0	.9	.4	7.4	9.8	.3	.0	.0	17.9

PERIOD: (OVER-ALL) 1963-1976

JULY

AREA 0030 ANTOFAGASTA
22.0S 71.5W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	2.9	4.3	.5	.0	.0	.0	7.7	1.6	1.2	.0	.0	.0	.0	2.8
1-2	.5	10.3	2.9	.0	.0	.0	13.6	.9	4.0	.3	.0	.0	.0	5.1
3-4	.0	6.8	11.8	.0	.0	.0	18.6	.3	2.3	1.0	.0	.0	.0	3.6
5-6	.0	1.1	4.9	.8	.0	.0	6.8	.0	.5	.0	.0	.0	.0	.5
7	.0	1.0	2.4	1.8	.0	.0	5.2	.0	.1	.4	.1	.0	.0	.5
8-9	.0	.2	.8	.0	.0	.0	1.0	.0	.1	.0	.0	.0	.0	.1
10-11	.0	.0	.0	.0	.3	.0	.3	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	3.4	23.6	23.4	3.2	.3	.0	53.8	2.8	8.2	1.7	.1	.0	.0	12.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.9	
1-2	.0	1.1	.0	.0	.0	.0	1.1	.0	.3	.3	.0	.0	.0	.6	
3-4	.0	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.0	1.6	.0	.0	.0	.0	1.6	.9	.3	.3	.0	.0	.0	1.5	92.2

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	15.5	6.7	.8	.0	.0	.0	22.9	
1-2	1.6	20.3	5.1	.0	.0	.0	26.9	
3-4	.8	12.0	16.0	.0	.0	.0	28.8	
5-6	.0	2.7	8.5	.8	.0	.0	12.0	
7	.0	1.3	4.0	1.9	.0	.0	7.2	
8-9	.0	.3	.8	.0	.0	.0	1.1	
10-11	.0	.0	.0	.0	.3	.0	.3	
12	.0	.0	.0	.5	.0	.0	.5	
13-16	.0	.0	.0	.3	.0	.0	.3	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	17.9	43.2	35.2	3.5	.3	.0	100.0	375

PERIOD: (OVER-ALL) 1949-1976

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	4.4	6.4	15.0	8.8	1.7	.6	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	250
6-7	.1	1.1	3.4	11.7	7.8	1.6	2.3	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	215
8-9	.0	.4	3.1	9.8	3.2	1.4	1.4	.3	.8	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	104
10-11	.0	.7	.7	1.3	.6	.8	.3	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	33
12-13	.0	.0	.8	.4	.7	.6	.3	.3	.6	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	27
>13	.0	.0	.0	.6	.6	.6	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	14
INDET	4.7	1.0	.8	.8	1.1	.6	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	65
TOTAL	65	68	183	180	111	43	33	9	14	2	0	0	0	0	0	0	0	0	0	708	5
PCT	9.2	9.6	25.8	25.4	15.7	6.1	4.7	1.3	2.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

AUGUST

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1870-1977AREA 0030 ANTOFAGASTA
22.2S 71.5W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNDW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	BLWG DUST	NO SIG WEA
N	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.6	.0	.0	.0	96.4
NE	10.8	.0	.0	.0	.0	.0	.0	10.8	.0	.0	.0	.0	.0	.0	89.2
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	1.4	.0	.0	.0	.0	.0	1.4	.9	.0	.0	.0	.0	.0	97.7
S	.1	.0	1.1	.0	.0	.0	.0	1.2	.3	.0	.2	.0	.0	.0	98.3
SW	.2	.0	3.6	.0	.0	.0	.0	3.8	.0	.0	.0	.0	.0	.0	96.2
W	.0	.0	6.7	.0	.0	.0	.0	6.7	.0	.0	.0	.0	.0	.0	93.3
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.0	1.4	.0	2.9	.0	94.2
TOT PCT	.2	.2	1.2	.0	.0	.0	.0	1.6	.4	.0	.3	.0	.2	.0	97.5
TOT OBS:	944														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNDW	OTHER FRZN PCPN	HAIL	PCPN AT OB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	BLWG DUST	NO SIG WEA
00003	.4	.0	1.2	.0	.0	.0	.0	1.6	.8	.0	.0	.0	.0	.0	97.7
06009	.0	.7	1.9	.0	.0	.0	.0	2.6	.0	.0	.4	.0	.4	.0	96.7
12015	.4	.0	.9	.0	.0	.0	.0	1.3	1.3	.0	.4	.0	.0	.0	96.9
18021	.0	.0	1.9	.0	.0	.0	.0	1.9	.0	.0	.5	.0	.5	.0	97.1
TOT PCT	.2	.2	1.5	.0	.0	.0	.0	1.9	.5	.0	.3	.0	.2	.0	97.1
TOT OBS:	964														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	2.1	2.6	.3	.0	.0	.0		5.0	4.9	3.3	.0	6.2	8.1	5.9	5.6	4.1	2.9	
NE	1.0	.6	.4	.0	.0	.0		2.7	3.6	1.2	4.8	2.0	2.3	2.7	.0	1.4	.2	
E	.9	.7	.2	.0	.0	.0		1.8	6.0	.8	.0	1.7	2.2	3.0	.0	2.3	.2	
SE	2.6	7.0	6.8	1.9	.2	.0		18.5	11.5	14.4	14.3	15.3	20.4	23.8	12.5	19.4	18.6	
S	6.5	21.6	15.3	2.4	.2	.0		46.0	10.0	49.6	61.9	45.5	36.7	41.7	59.7	48.6	51.0	
SW	3.5	6.5	1.5	.2	.0	.0		11.8	6.6	15.3	9.5	10.6	10.1	8.2	5.6	11.8	16.7	
W	1.0	.9	.1	.0	.0	.0		2.0	4.3	3.2	.0	2.8	2.2	.5	5.6	1.6	1.5	
NW	1.6	1.9	.2	.0	.0	.0		3.7	4.6	2.6	.0	4.0	5.1	2.7	.0	3.6	4.9	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	9.5							9.5	.0	9.8	9.5	11.8	12.9	11.3	11.1	7.1	3.9	
TOT OBS	1356	1970	1158	216	18	0	4718		8.2	784	21	871	620	665	18	1331	408	
TOT PCT	28.7	41.8	24.5	4.6	.4	.0	100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WNO DIR	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40					00 03	06 09	12 15	18 21
N	3.9	1.2	.0	.0	.0		5.0	4.9	3.2	7.0	5.9	3.8
NE	1.5	.2	.0	.0	.0		1.7	3.6	1.1	2.1	2.6	1.1
E	1.2	.4	.1	.0	.0		1.8	6.0	.7	1.9	3.0	1.8
SE	5.9	7.8	4.1	.6	*		18.5	11.5	14.4	17.4	23.5	19.2
S	17.6	19.9	7.8	.5	.1		46.0	10.0	49.6	41.8	42.1	49.2
SW	7.4	3.8	.6	.1	.0		11.8	6.6	15.1	10.4	8.2	13.0
W	1.7	.3	*	.0	.0		2.0	4.3	3.1	2.5	.7	1.6
NW	3.0	.7	.0	.0	.0		3.7	4.6	2.5	4.5	2.6	3.9
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	9.5						9.5	.0	9.8	12.3	11.3	6.4
TOT OBS	2440	1615	598	59	6	4718		8.2	805	1491	683	1739
TOT PCT	51.7	34.2	12.7	1.3	.1		100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1870-1977

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47					
0000	9.8	14.5	42.2	27.0	6.1	.4	.0	.0	8.9	100.0	805
0600	12.3	20.5	41.2	22.0	3.6	.4	.0	.0	7.5	100.0	1491
1200	11.3	20.5	39.2	24.9	3.7	.4	.0	.0	7.9	100.0	683
1800	6.4	19.7	43.0	25.5	5.1	.3	.0	.0	8.6	100.0	1739
TOT	450	906	1970	1158	21.6	.18	.0	.0	8.2		4718
PCT	9.5	19.2	41.8	24.5	4.6	.4	.0	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & 8-10	TOTAL CLOUD OBS	MEAN CLOUD COVER
N	.0	.1	.4	1.3		7.3
NE	.1	.0	.1	.6		6.5
E	.6	.0	.1	.5		4.5
SE	.6	1.9	4.0	8.9		6.7
S	11.0	5.3	12.2	28.8		5.9
SW	2.5	1.3	2.7	5.6		5.5
W	.1	.1	.3	.4		6.1
NW	.4	.0	.5	.8		5.5
VAR	.0	.0	.0	.0		.0
CALM	1.3	.7	1.0	5.8		6.4
TOT OBS	116	66	147	363	692	6.0
TOT PCT	16.8	9.5	21.2	52.5	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 TOTAL ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999			
N	.0	.0	.0	.0	.9	.4	.3	.0	.0	.0	.3	
NE	.1	.0	.0	.1	.4	.0	.0	.0	.0	.0	.1	
E	.0	.0	.1	.3	.3	.0	.0	.0	.0	.0	.6	
SE	.2	.0	.1	2.8	6.4	2.0	.5	.0	.0	.0	3.5	
S	.2	.3	.4	8.5	22.3	6.5	1.5	.0	.0	.1	17.6	
SW	.2	.0	.1	1.6	3.9	1.6	.2	.0	.0	.0	4.6	
W	.0	.0	.0	.0	.6	.1	.0	.0	.0	.0	.3	
NW	.0	.0	.0	.1	.4	.3	.1	.0	.0	.0	.5	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.1	.9	4.3	.4	.6	.1	.1	.0	2.2	
TOT OBS	5	2	6	99	273	78	22	1	1	1	204	692
TOT PCT	.7	.3	.9	14.3	39.5	11.3	3.2	.1	.1	.1	29.5	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)				VSBY (NM)				OR >0
	OR >10	OR >5	OR >2	OR >1	OR >1/2	OR >1/4	OR >50YD		
NR >6500	.1	.3	.3	.3	.3	.3	.3	.3	
NR >5000	.1	.3	.3	.3	.3	.3	.3	.3	
NR >3500	2.6	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
NR >2000	13.3	14.7	14.7	14.7	14.7	14.7	14.7	14.7	
NR >1000	49.9	54.2	54.2	54.2	54.2	54.2	54.2	54.2	
NR >600	62.7	68.8	69.1	69.1	69.1	69.1	69.1	69.1	
NR >500	63.2	69.7	70.0	70.0	70.0	70.0	70.0	70.0	
NR >150	63.2	69.8	70.2	70.2	70.2	70.2	70.2	70.2	
NR >0	63.5	70.5	71.0	71.0	71.0	71.0	71.0	71.0	
TOTAL	444	493	496	496	496	496	496	496	

TOTAL NUMBER OF OBS: 699

PCT FREQ NH <5/8: 29.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
6.2	6.5	6.9	4.1	3.8	3.3	6.8	13.2	49.0	.1	780

PERIOD: (PRIMARY) 1907-1977
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.4	.2	.0	.0	.0	.1	.7	.7
	TOT %	.0	.0	.0	.0	.4	.2	.0	.0	.0	.1	.7	.7
5<10	PCP	.0	.0	.0	.1	.4	.4	.0	.0	.0	.0	1.0	1.0
	NO PCP	1.5	.0	.0	1.3	4.8	1.3	.2	.3	.0	1.5	11.0	11.0
	TOT %	1.5	.0	.0	1.4	5.2	1.7	.2	.3	.0	1.5	11.9	11.9
10+	PCP	.0	.1	.0	.1	.3	.0	.1	.0	.0	.0	.6	.6
	NO PCP	1.4	.9	1.0	13.5	51.9	9.8	1.3	1.3	.0	5.6	86.7	86.7
	TOT %	1.4	1.0	1.0	13.6	52.2	9.8	1.4	1.3	.0	5.6	87.3	87.3
TOT OBS													940
TOT PCT													3.0 1.0 1.0 15.1 57.8 11.8 1.6 1.6 .0 7.2 100.0

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2<5	0-3	.0	.0	.0	.0	.1	.2	.0	.0	.0	.2	.5	.5
	4-10	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	.2
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.3	.2	.0	.0	.0	.2	.7	.7
5<10	0-3	.8	.1	.0	.2	.6	.6	.2	.2	.0	1.5	4.2	4.2
	4-10	.7	.0	.0	.7	3.0	1.0	.0	.3	.0	.0	5.7	5.7
	11-21	.0	.0	.0	.2	.8	.2	.0	.0	.0	.0	1.3	1.3
	22+	.0	.0	.0	.1	.3	.0	.0	.0	.0	.0	.4	.4
	TOT %	1.6	.1	.0	1.2	4.7	1.8	.2	.5	.0	1.5	11.6	11.6
10+	0-3	.7	.4	.1	1.2	4.7	1.7	.3	.6	.0	7.1	16.8	16.8
	4-10	1.6	.9	.5	5.1	23.6	6.4	1.5	1.0	.0	.0	40.7	40.7
	11-21	.3	.1	.2	4.6	18.2	2.2	.0	.0	.0	.0	25.6	25.6
	22+	.0	.0	.0	.9	3.4	.3	.0	.0	.0	.0	4.7	4.7
	TOT %	2.7	1.4	.8	11.8	49.9	10.6	1.8	1.6	.0	7.1	87.7	87.7
TOT OBS													1244
TOT PCT													4.3 1.5 .8 13.0 54.9 12.6 2.0 2.1 .0 8.8 100.0

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1870-1977

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8) AND
OCCURRENCE OF NH <3/8 BY HOUR

HR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <3/8 ANY HGT	TOTAL OBS
00003	.5	.5	.5	16.3	32.1	11.6	2.1	.0	.0	.0	63.7	36.3	190
06009	.0	.0	.0	14.8	43.4	9.3	2.7	.0	.0	.0	70.3	29.7	182
12015	.6	.0	1.7	14.4	45.9	14.9	4.4	.6	.0	.6	82.9	17.1	181
18021	1.9	.6	1.2	13.0	33.3	8.6	3.1	.0	.6	.0	62.3	37.7	162
TOT	5	2	6	105	277	80	22	1	1	1	500	215	715
PCT	.7	.3	.8	14.7	38.7	11.2	3.1	.1	.1	.1	69.9	30.1	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NH) BY HOUR

HR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.0	1.3	9.1	89.6	317
06009	.0	.0	.0	.5	13.7	85.8	409
12015	.0	.0	.0	.4	11.4	88.2	263
18021	.0	.0	.0	.7	12.4	86.9	275
TOT	0	0	0	9	149	1106	1264
PCT	.0	.0	.0	.7	11.8	87.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NH) AND/OR
CEILING HGT (FEET, NH >4/8), BY HOUR

HR (GMT)	<150 350YD	<600 41	<1000 45	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	.5	1.6	18.1	46.3	35.6	188
06009	.0	.0	15.3	57.1	27.7	177
12015	.6	2.3	17.0	66.5	16.5	176
18021	1.9	3.8	17.1	46.8	36.1	158
TOT	5	13	118	379	202	699
PCT	.7	1.9	16.9	54.2	28.9	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
75/79	.0	.0	.0	.0	.1	.0	.0	.0	1	.1
70/74	.0	.0	.0	.0	.4	.1	.0	.0	4	.5
65/69	.0	.0	.0	.5	.8	1.8	.2	.4	31	3.7
60/64	.0	.0	.0	.8	8.5	20.3	7.5	1.8	326	39.0
55/59	.0	.0	.0	1.0	4.8	25.0	18.5	5.6	459	54.9
50/54	.0	.0	.0	.0	.0	.2	.8	.7	15	1.8
TOTAL	0	0	0	19	122	397	227	71	836	100.0
PCT	.0	.0	.0	2.3	14.6	47.5	27.2	8.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
75/79	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
70/74	.0	.1	.0	.0	.3	.0	.0	.0	.0	.0
65/69	.0	.0	.1	.4	2.2	.2	.0	.2	.0	.5
60/64	1.3	.1	.8	7.4	21.1	4.4	.8	.6	.0	2.5
55/59	1.8	.5	.3	8.2	30.1	6.1	.8	1.0	.0	6.0
50/54	.2	.0	.0	.0	1.3	.3	.0	.0	.0	.0
TOTAL	3.3	.7	1.4	16.0	55.0	11.1	1.6	1.9	.0	9.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	77	66	63	59	55	54	50	58.9	805
06009	74	64	62	58	54	52	50	57.9	1488
12015	73	64	62	58	54	52	50	58.2	680
18021	74	70	67	61	56	54	52	61.2	1675
TOT	77	68	65	59	55	53	50	59.3	4648

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.5	12.8	50.9	29.4	6.4	78	218		
06009	.0	4.0	10.5	43.1	33.5	8.9	78	248		
12015	.0	1.0	13.1	44.7	28.2	13.1	79	206		
18021	.0	3.3	22.7	51.4	16.0	6.6	75	181		
TOT	0	19	122	403	234	75	78	853		

PERIOD: (PRIMARY) 1907-1977
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	63 68	69 72	TOT	W FOG	WD FOG
14/16	.0	.0	.0	.0	.2	.0	2	.0	.2
9/10	.0	.1	.1	.3	.3	.1	9	.0	1.0
7/8	.0	.1	.2	.0	.7	.2	11	.0	1.3
6	.0	.0	.1	.1	.0	.1	3	.0	.3
5	.0	.0	.1	.7	.3	.0	10	.0	1.1
4	.0	.0	.2	1.0	.7	.0	17	.0	1.9
3	.0	.0	.7	.7	1.1	.0	22	.0	2.5
2	.0	.1	1.6	3.0	.9	.0	45	.0	5.1
1	.0	.6	3.4	3.1	.3	.0	65	.0	7.4
0	.0	1.3	8.1	6.9	.0	.0	143	.0	16.3
-1	.0	1.0	10.0	5.4	.1	.0	145	.1	16.4
-2	.0	1.4	11.2	3.0	.0	.1	137	.1	15.5
-3	.0	2.3	8.8	2.3	.0	.0	117	.0	13.3
-4	.0	1.8	6.5	.7	.0	.0	79	.0	9.0
-5	.0	1.9	2.5	.2	.0	.0	41	.0	4.7
-6	.2	.6	1.0	.0	.0	.0	16	.0	1.8
-7/-8	.2	.6	.8	.0	.0	.0	14	.1	1.5
-9/-10	.0	.1	.1	.0	.0	.0	2	.0	.2
TOTAL	4		487		38		878	3	875
PCT	.5	104	240		5		100.0	.3	99.7

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.3	.0	.0	.0	.3	.0	.9	.0	.0	.0	.0	.9
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.3	.0	.0	.0	.3	.0	.9	.0	.0	.0	.0	.9

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.4	.4	.0	.0	.0	.0	.8
1-2	.0	.3	.0	.0	.0	.0	.3	.0	3.9	.8	.0	.0	.0	4.7
3-4	.0	.0	.0	.0	.0	.0	.0	.0	2.5	.5	.3	.0	.0	3.4
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.4	3.0	.4	.0	.0	3.8
7	.0	.0	.5	.0	.0	.0	.5	.0	.0	1.1	1.1	.0	.0	2.2
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0	.0	.4
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.3	.5	.0	.0	.0	.9	.4	7.2	5.7	2.0	.0	.0	15.2

PERIOD: (OVER-ALL) 1963-1977

AUGUST

AREA 0030 ANTOFAGASTA
22.25 71.5W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	1.8	4.6	.0	.0	.0	.0	6.4	1.3	1.3	.0	.0	.0	.0	2.6
1-2	.5	10.5	4.2	.0	.0	.0	15.2	.7	2.0	.0	.0	.0	.0	3.3
3-4	.3	5.9	12.7	1.8	.0	.0	20.7	.0	.4	1.7	.1	.0	.0	2.2
5-6	.0	1.1	5.6	1.2	.0	.0	7.9	.0	.1	.1	.0	.0	.0	.2
7	.0	.9	3.2	2.3	.0	.0	6.3	.3	.1	.2	.4	.0	.0	.9
8-9	.0	.0	1.3	1.7	.3	.0	3.4	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.3	.3	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.3	.0	.0	.3
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	2.7	22.9	27.4	7.6	.3	.0	60.9	2.3	4.4	2.0	.8	.0	.0	9.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.2	.0	.0	.0	.0	.0	.2	.3	.3	.0	.0	.0	.0	.6	
1-2	.0	.5	.0	.0	.0	.0	.5	.0	.6	.0	.0	.0	.0	.6	
3-4	.0	.3	.0	.0	.0	.0	.3	.0	.3	.0	.0	.0	.0	.3	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.2	.9	.0	.0	.0	.0	1.1	.3	1.3	.0	.0	.0	.0	1.6	90.3

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	15.3	6.7	.0	.0	.0	.0	22.0	
1-2	1.2	19.0	5.2	.0	.0	.0	25.4	
3-4	.3	9.2	14.7	2.1	.0	.0	26.3	
5-6	.0	1.5	8.6	1.5	.0	.0	11.6	
7	.3	.9	4.9	3.7	.0	.0	9.8	
8-9	.0	.0	1.5	1.8	.3	.0	3.7	
10-11	.0	.0	.3	.3	.0	.0	.6	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.6	.0	.0	.6	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	17.1	37.3	35.2	10.1	.3	.0	100.0	327

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	3.0	6.1	11.3	4.8	1.5	1.2	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	169	3
6-7	.0	.7	4.7	10.1	6.8	3.8	1.3	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	167	6
8-9	.0	.7	2.8	4.7	6.0	3.2	1.3	.3	.7	.3	.0	.3	.2	.0	.0	.0	.0	.0	.0	123	7
10-11	.0	.5	.2	1.3	1.3	1.3	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	35	7
12-13	.0	.0	.3	1.2	.3	.7	.5	.8	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	24	8
13	.0	.0	.0	.0	.3	.5	.5	.3	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	17	11
INDET	4.0	1.5	1.7	1.7	1.5	.7	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	67	3
TOTAL	42	57	126	143	107	68	29	9	16	2	0	2	1	0	0	0	0	0	0	602	5
PCT	7.0	9.5	20.9	23.8	17.8	11.3	4.8	1.5	2.7	.3	.0	.3	.2	.0	.0	.0	.0	.0	.0	100.0	

SEPTEMBER

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1868-1977AREA 0030 ANTOFAGASTA
22.15 71.4W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA						
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THDR LTNG	FGD WD PCPN	FGD WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SIG WEA
N	.0	.0	4.7	.0	.0	.0	.0	4.7	.0	.0	.0	.0	.0	95.3
NE	.0	.0	12.9	.0	.0	.0	.0	12.9	.0	.0	.0	.0	.0	87.1
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.6	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	98.6
S	.1	.0	.5	.0	.0	.0	.0	.6	.3	.0	.8	.0	.3	98.1
SW	.2	.0	.0	.0	.0	.0	.0	.2	.0	.0	2.0	.0	.2	97.5
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
TOT PCT	.1	.1	.5	.0	.0	.0	.0	.7	.3	.0	.7	.0	.2	98.1
TOT OBS:	1009													

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA						
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT 08 TIME	PCPN PAST HOUR	THDR LTNG	FGD WD PCPN	FGD WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST SIG WEA
00003	.0	.0	.8	.0	.0	.0	.0	.8	.0	.0	.8	.0	.8	97.6
06009	.3	.0	1.0	.0	.0	.0	.0	1.3	.3	.0	.3	.0	.3	97.7
12015	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.4	.0	.4	98.4
18011	.0	.4	.0	.0	.0	.0	.0	.4	.0	.0	1.2	.0	.0	98.3
TOT PCT	.1	.1	.5	.0	.0	.0	.0	.7	.3	.0	.7	.0	.4	98.0
TOT OBS:	1044													

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	1.4	1.7	.1	*	.0	.0		3.3	4.7	1.8	7.4	3.9	6.4	4.4	.0	1.9	1.5	
NE	.6	.6	*	*	.0	.0		1.2	4.5	.6	.0	.9	2.6	2.0	.0	1.1	1.5	
E	.8	.0	.3	*	.0	.0		2.0	6.1	1.4	.0	1.9	2.4	3.4	.0	1.8	1.0	
SE	2.7	7.4	7.3	1.1	.0	.0		18.5	10.5	17.5	9.3	16.4	16.4	21.4	21.7	19.8	19.7	
S	8.2	25.4	14.0	1.7	*	.0		49.3	8.9	53.3	65.7	47.0	41.2	45.1	55.0	52.8	55.5	
SW	3.2	6.9	1.2	.1	.0	.0		11.3	6.3	14.0	6.5	10.6	7.6	9.5	16.7	12.5	13.4	
W	1.3	.7	.0	.0	.0	.0		2.0	3.3	2.3	.0	2.2	2.3	1.8	.0	1.5	2.0	
NW	1.4	1.4	*	.0	.0	.0		2.8	4.0	1.7	3.7	4.6	5.2	1.4	.0	1.9	2.3	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	9.5							9.5	.0	7.4	7.4	12.5	15.7	11.1	6.7	6.6	4.0	
TOT OBS	1555	2422	1238	158	1	0	5384		7.6	846	27	1018	745	791	15	1469	473	
TOT PCT	29.1	45.0	23.0	2.9	*	.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00	03	09	18
N	2.6	.6	*	.0	.0		3.3	4.7	1.9	5.0	4.3	1.9
NE	1.1	.2	*	.0	.0		1.2	4.5	.6	1.6	1.9	1.0
E	1.4	.5	.1	*	.0		2.0	6.1	1.3	2.1	3.3	1.6
SE	6.2	8.4	3.6	.3	.0		18.5	10.5	17.3	16.4	21.4	19.8
S	21.3	21.9	5.9	.2	.0		49.3	8.9	53.7	44.6	45.3	53.4
SW	7.1	3.9	.3	*	.0		11.3	6.3	13.8	9.4	9.6	12.7
W	1.9	.1	.0	.0	.0		2.0	3.3	2.2	2.2	1.8	1.6
NW	2.5	.3	*	.0	.0		2.8	4.0	1.7	4.9	1.4	2.0
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	9.5						9.5	.0	7.4	13.8	11.0	6.0
TOT OBS	2883	1930	540	31	0	5384		7.6	873	1763	806	1942
TOT PCT	53.5	35.8	10.0	.6	.0		100.0		100.0	100.0	100.0	100.0

SEPTEMBER

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1868-1977

AREA 0030 ANTUFAGASTA
22.1S 71.4W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)						48+	MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47					
0000	7.4	13.7	49.3	25.3	4.2	.0	.0	.0	8.5	100.0	873
0600	13.8	22.4	43.1	18.4	2.3	.0	.0	.0	6.6	100.0	1763
1200	11.0	22.8	41.6	22.7	1.9	.0	.0	.0	7.0	100.0	806
1800	6.0	18.1	49.2	26.2	3.4	.1	.0	.0	6.3	100.0	1942
TOT	514	1051	2422	1238	158	1	0	7.6			5384
PCT	9.5	19.5	45.0	23.0	2.9	*	.0		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	# & OBS	TOTAL OBS	MEAN CLOUD COVER
N	.3	.1	.3	1.4		6.4
NE	.0	.0	.2	.8		7.8
E	.0	.0	.7	8.0		8.0
SE	.6	1.0	3.0	11.7		7.2
S	7.0	5.9	13.2	36.0		6.4
SW	1.2	.6	2.1	6.4		6.6
W	.1	.1	.3	.4		6.2
NW	.1	.0	.3	.8		7.3
VAR	.0	.0	.0	.0		.0
CALM	.1	.2	.9	4.4		7.4
TOT OBS	77	65	165	510	817	6.6
TOT PCT	9.4	8.0	20.2	62.4	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH > 4/8)
AND OCCURRENCE OF NH < 5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH < 5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999			
N	.0	.0	.1	.1	1.0	.4	.0	.0	.0	.0	.5	
NE	.0	.0	.0	.5	.2	.2	.0	.0	.0	.0	.0	
E	.0	.0	.0	.0	.5	.1	.0	.0	.1	.0	.0	
SE	.0	.0	.4	2.8	6.5	3.2	.5	.0	.2	.0	2.5	
S	.2	.2	1.1	7.7	21.8	12.1	3.3	.8	.1	.5	15.3	
SW	.0	.0	.3	1.3	4.5	1.7	.2	.0	.0	.1	2.1	
W	.0	.0	.1	.2	.1	.2	.0	.0	.0	.0	.3	
NW	.0	.0	.2	.2	.5	.2	.0	.0	.0	.0	.1	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	1.1	1.8	1.7	.0	.0	.0	.0	1.0	
TOT OBS	2	4	9	114	301	161	33	7	3	5	178	817
TOT PCT	.2	.5	1.1	14.0	36.8	19.7	4.0	.9	.4	.6	21.8	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH > 4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	> 10	> 5	> 2	> 1	> 1/2	> 1/4	> 50YD	> 0
> 3500	.6	.9	.9	.9	.9	.9	.9	.9
> 3000	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.8
> 2500	3.0	5.7	5.7	5.7	5.7	5.7	5.7	5.7
> 2000	22.7	25.0	25.1	25.1	25.1	25.1	25.1	25.1
> 1000	56.7	62.4	62.8	62.8	62.8	62.8	62.8	62.8
> 500	68.7	76.0	76.4	76.4	76.4	76.4	76.4	76.4
> 300	68.7	77.1	77.5	77.5	77.5	77.5	77.5	77.5
> 150	69.0	77.6	77.9	77.9	77.9	77.9	77.9	77.9
> 0	69.0	77.6	77.9	77.9	78.1	78.1	78.1	78.1
TOTAL	582	654	657	657	658	658	658	658

TOTAL NUMBER OF OBS: 843

PCT FREQ NH < 5/8: 21.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBS	TOTAL OBS
	5.4	2.7	4.2	4.5	4.2	3.7	7.0	10.7	57.3	.2	924

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1808-1977

SEPTEMBER

AREA 0030 ANTOFAGASTA
22.1S 71.4W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OF NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.0	.1
	TOT %	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.0	.1
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	*	.3	.0	.0	.0	.0	.0	.0	.4
	TOT %	.0	.0	.0	*	.3	.0	.0	.0	.0	.0	.0	.4
5<10	PCP	.0	.1	.0	.0	.2	.0	.0	.0	.0	.0	.0	.3
	NO PCP	.2	.1	.0	2.2	7.5	1.3	.1	.1	.0	.9	12.4	
	TOT %	.2	.2	.0	2.2	7.7	1.3	.1	.1	.0	.9	12.7	
10+	PCP	.1	.0	.0	.1	.2	*	.0	.0	.0	.0	.4	
	NO PCP	1.9	.6	.7	13.7	52.7	9.6	.8	1.0	.0	5.5	86.4	
	TOT %	2.0	.6	.7	13.8	52.9	9.6	.8	1.0	.0	5.5	86.8	
TOT OBS													
TOT PCT													
		2.1	.8	.7	10.0	61.0	11.0	.9	1.1	.0	6.4	100.0	1005

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.1	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.1	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
2<5	0-3	.0	.0	.0	.1	.1	.0	.0	.0	.0	.1	.2	
	4-10	.2	.0	.0	.0	.1	.0	.0	.0	.0	.0	.2	
	11-21	.0	.0	.0	*	.1	.0	.0	.0	.0	.0	.2	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.2	.0	.0	.1	.2	.0	.0	.0	.0	.1	.6	
5<10	0-3	.1	.0	.0	.1	.9	.3	.1	.1	.0	1.8	3.3	
	4-10	.1	.2	.0	.8	4.4	1.1	.0	.1	.0	.0	6.6	
	11-21	.0	.0	.0	.8	2.3	.3	.0	.0	.0	.0	3.4	
	22+	.0	.0	.0	.1	.5	*	.0	.0	.0	.0	.6	
	TOT %	.2	.2	.0	1.7	8.0	1.6	.1	.2	.0	1.8	13.8	
10+	0-3	.5	.1	.2	.7	3.9	1.2	.5	.2	.0	7.3	14.8	
	4-10	1.1	.3	.3	5.2	24.8	7.4	.9	.8	.0	.0	40.7	
	11-21	.1	.0	.2	5.6	19.4	2.0	.0	.1	.0	.0	27.4	
	22+	.1	.0	.0	.5	1.9	*	.0	.0	.0	.0	2.6	
	TOT %	1.7	.4	.6	12.0	50.0	10.8	1.4	1.1	.0	7.3	85.5	
TOT OBS													
TOT PCT													
		2.1	.6	.6	13.9	58.4	12.4	1.5	1.3	.0	9.2	100.0	1281

SEPTEMBER

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1868-1977

AREA 0030 ANTOFAGASTA
22.15 71.4W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8) AND
OCCURRENCE OF NH < 3/8 BY HOUR

HOURL (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	.0	.0	1.4	10.6	35.3	18.8	3.4	1.0	.0	.5	71.0	29.0	207
06009	.0	.0	.9	11.0	42.0	16.0	4.1	.5	.0	.0	74.4	25.6	219
12015	.0	.9	.9	17.4	36.6	24.4	4.2	.9	.9	1.4	87.8	12.2	213
18021	.9	.9	.9	14.7	34.6	18.0	3.7	.9	.5	.5	75.6	24.4	217
TOT	2	4	9	115	318	165	33	7	3	5	661	195	856
PCT	.2	.5	1.1	13.4	37.1	19.3	3.9	.8	.4	.6	77.2	22.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOURL (GMT)	< 1/2	1/2 < 1	1 < 2	2 < 5	5 < 10	10+	TOTAL OBS
00003	.0	.0	.3	.3	14.8	84.5	310
06009	.0	.0	.0	.5	15.3	84.3	426
12015	.0	.0	.0	.7	12.0	87.3	283
18021	.0	.3	.0	1.0	12.5	86.2	297
TOT	0	1	1	8	182	1124	1316
PCT	.0	.1	.1	.6	13.8	85.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NH > 4/8) BY HOUR

HOURL (GMT)	< 150 < 500	< 600 < 1	< 1000 < 5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	.0	1.5	12.7	58.8	28.4	204
06009	.0	.9	12.0	63.1	24.9	217
12015	.0	1.9	19.3	68.9	11.8	212
18021	.5	2.4	18.6	58.6	22.9	210
TOT	1	14	132	526	185	843
PCT	.1	1.7	15.7	62.4	21.9	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
70/74	.0	.0	.0	.0	.2	.1	.1	.0	4	.4
65/69	.0	.0	.0	.1	.7	1.2	.6	.2	25	2.8
60/64	.0	.0	.0	.7	11.8	18.0	10.8	2.1	393	43.3
55/59	.0	.0	.0	.1	5.2	23.6	19.4	4.0	474	52.3
50/54	.0	.0	.0	.0	.1	.2	.7	.2	11	1.2
TOTAL	0	0	0	8	163	391	286	59	907	100.0
PCT	.0	.0	.0	.9	18.0	43.1	31.5	6.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
70/74	.1	.0	.0	.3	.0	.0	.0	.0	.0	.0
65/69	.0	.0	.0	.2	1.4	.4	.3	.1	.0	.3
60/64	.4	.3	.4	10.2	25.5	3.0	.6	.7	.0	2.2
55/59	1.2	.4	.1	6.9	33.3	6.7	.4	.5	.0	2.8
50/54	.0	.0	.0	.1	.9	.2	.0	.0	.0	.0
TOTAL	1.7	.8	.5	17.4	61.4	10.3	1.3	1.3	.0	5.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	73	66	64	59	56	55	53	59.3	870
06009	70	64	63	58	55	53	48	58.4	1778
12015	73	67	63	59	55	54	51	59.0	799
18021	77	72	68	62	57	55	54	61.9	1635
TOT	77	69	65	59	55	54	48	59.9	5282

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.9	15.1	45.3	32.4	6.2	77	225
06009	.0	.0	10.5	39.7	41.5	8.3	80	277
12015	.0	.9	20.7	43.7	28.8	5.9	77	222
18021	.0	1.9	26.9	46.8	18.5	6.0	75	216
TOT	0	8	167	410	292	63	77	940

SEPTEMBER

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1868-1977AREA 0030 ANTOFAGASTA
22.15 71.4W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	TOT	W FOG	NO FOG
11/13	.0	.0	.0	.0	.4	.0	4	.0	.4
9/10	.0	.0	.1	.2	.4	.1	8	.0	.8
7/8	.0	.0	.0	.4	.2	.0	6	.0	.6
6	.0	.2	.1	.1	.1	.0	5	.0	.5
5	.0	.1	.6	.2	.1	.0	10	.0	1.1
4	.1	.1	.7	.7	.0	.0	16	.0	1.7
3	.1	.5	1.4	.2	.0	.0	21	.0	2.2
2	.2	1.5	3.8	.5	.0	.0	57	.2	5.8
1	.4	3.6	3.8	.6	.0	.0	80	.1	8.4
0	1.0	10.2	5.0	.1	.0	.0	153	.2	16.0
-1	1.3	11.6	4.2	.0	.0	.0	162	.1	17.1
-2	1.8	12.6	2.4	.0	.0	.0	159	.1	16.8
-3	2.7	9.5	1.6	.0	.0	.0	120	.0	13.8
-4	1.9	4.2	.6	.0	.0	.0	64	.0	6.8
-5	1.0	3.4	.2	.0	.0	.0	43	.0	4.6
-6	.7	1.0	.0	.0	.0	.0	16	.0	1.7
-7/-8	.3	.6	.0	.0	.0	.0	9	.0	1.0
TOTAL	108	558	234	30	12	1	943	.7	936
PCT	11.5	59.2	24.8	3.2	1.3	.1	100.0	.7	99.3

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						PCT	NE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.3	.5	.0	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	.0	1.0
3-4	.0	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.3	.8	.0	.0	.0	.0	1.0	.0	1.0	.0	.0	.0	.0	1.0

HGT	E						PCT	SE						PCT
	1-3	4-10	11-21	22-33	34-47	48+		1-3	4-10	11-21	22-33	34-47	48+	
<1	.0	.3	.0	.0	.0	.0	.3	.1	.9	.0	.0	.0	.0	1.0
1-2	.0	.0	.0	.0	.0	.0	.0	.3	2.3	2.1	.0	.0	.0	4.8
3-4	.0	.0	.0	.0	.0	.0	.0	.0	3.2	3.8	.3	.0	.0	7.2
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.6	1.4	.0	.0	.0	2.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.1	1.8	.0	.0	.0	2.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.3	.0	.0	.0	.0	.3	.3	7.2	9.1	.8	.0	.0	17.4

PERIOD: (OVER-ALL) 1963-1977

SEPTEMBER

AREA 0030 ANTOFAGASTA
22.15 71.4W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	2.1	4.9	.5	.0	.0	.0	7.6	.2	.7	.3	.0	.0	.0	1.2
1-2	.0	13.0	2.7	.0	.0	.0	15.7	.1	2.6	.4	.0	.0	.0	3.1
3-4	.0	9.8	11.7	.5	.0	.0	21.9	.0	1.9	1.2	.0	.0	.0	3.1
5-6	.0	2.3	7.0	1.0	.0	.0	10.4	.0	.5	.2	.0	.0	.0	.7
7	.0	.4	2.7	.8	.0	.0	3.9	.0	.0	.1	.0	.0	.0	.1
8-9	.0	.3	.0	.8	.0	.0	1.1	.0	.0	.3	.1	.0	.0	.4
10-11	.0	.3	.3	1.3	.0	.0	1.8	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.5	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	2.1	30.9	25.3	4.5	.0	.0	62.9	.3	5.7	2.5	.1	.0	.0	8.6

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.2	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.2	.8	.0	.0	.0	.0	1.0	.0	.7	.0	.0	.0	.0	.7	.7
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	.3
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.4	.8	.0	.0	.0	.0	1.2	.0	.7	.3	.0	.0	.0	1.0	93.5

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	11.9	7.1	.8	.0	.0	.0	19.7	
1-2	.8	19.9	5.1	.0	.0	.0	25.8	
3-4	.0	14.6	16.4	.8	.0	.0	31.8	
5-6	.0	3.3	8.3	1.0	.0	.0	12.6	
7	.0	.5	4.5	.8	.0	.0	5.8	
8-9	.0	.3	.3	1.5	.0	.0	2.0	
10-11	.0	.3	.3	1.3	.0	.0	1.8	
12	.0	.0	.5	.0	.0	.0	.5	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	12.6	46.0	36.1	5.3	.0	.0	100.0	396

PERIOD: (OVER-ALL) 1950-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.2	9.3	13.0	3.7	2.6	.3	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	231
6-7	.0	1.6	5.2	10.2	4.1	3.4	1.4	1.1	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	206
8-9	.0	.3	2.9	4.7	4.4	3.3	1.6	1.1	2.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	152
10-11	.0	.1	1.1	1.9	2.6	.5	1.1	.5	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	61
12-13	.0	.0	.7	.3	.3	.5	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	17
>13	.0	.0	.0	.3	.3	.3	.1	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9
INDET	2.7	.8	1.1	.4	1.0	.5	.4	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	53
TOTAL	36	89	175	156	111	65	39	23	34	1	0	0	0	0	0	0	0	0	0	0	729
PCT	4.9	12.2	24.0	21.4	15.2	8.9	5.3	3.2	4.7	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1864-1977

OCTOBER

AREA 0030 ANTDFAGASTA
21.9S 71.6W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHMK	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG PCPN	FOG WD PCPN	SMOKE HAZE	BLWG DUST	NO SIG WEA
N	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	.2	.0	98.6
S	.0	.0	.6	.0	.0	.0	.2	.8	.3	.2	.8	.0	.1	.0	98.0
SW	.0	.0	3.7	.0	.0	.0	.0	3.7	.2	.0	.9	.0	.0	.0	95.2
W	.0	.0	7.3	.0	.0	.0	.0	7.3	.0	.0	.0	.0	.0	.0	92.7
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	2.4	.0	2.4	.0	.0	.0	95.1
TOT PCT	.0	.0	.9	.0	.0	.0	.1	1.0	.3	.1	.9	.0	.1	.0	97.6
TOT OBS:	885														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHMK	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FOG PCPN	FOG WD PCPN	SMOKE HAZE	BLWG DUST	NO SIG WEA
00003	.0	.0	1.4	.0	.0	.0	.0	1.4	.0	.0	.9	.0	.0	.0	97.7
06009	.0	.0	.7	.0	.0	.0	.4	1.1	.4	.4	1.1	.0	.4	.0	97.1
12015	.0	.0	1.4	.0	.0	.0	.0	1.4	.5	.0	1.4	.0	.0	.0	96.7
18021	.0	.0	.5	.0	.0	.0	.0	.5	.5	.0	.0	.0	.0	.0	99.1
TOT PCT	.0	.0	1.0	.0	.0	.0	.1	1.1	.3	.1	.9	.0	.1	.0	97.6
TOT OBS:	921														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	0-3	WIND SPEED (KNOTS)					48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
		4-10	11-21	22-33	34-47	00					03	06	09	12	15	18	21	
N	1.5	1.2	*	.0	.0	.0		2.7	3.9	1.2	.0	4.3	5.0	4.4	.0	1.6	.5	
NE	.6	.5	*	.0	.0	.0		1.2	3.8	.6	.0	1.1	1.9	2.6	.0	.8	.3	
E	.7	.6	.1	.0	.0	.0		1.4	4.9	.7	.0	1.5	2.0	2.7	7.3	1.1	.3	
SE	2.7	10.1	9.5	.5	*	.0		18.7	9.0	17.0	18.1	18.4	17.7	21.8	21.9	19.4	17.0	
S	9.7	28.6	11.4	.8	.2	.0		50.7	8.1	56.2	51.4	46.8	43.0	43.4	57.3	54.8	57.4	
SW	3.8	7.8	1.5	.1	*	.0		13.2	6.4	14.4	25.0	12.5	10.6	11.4	13.5	13.3	18.2	
W	1.2	.8	.1	.0	.0	.0		2.1	3.7	1.9	5.6	2.6	3.6	1.3	.0	1.8	1.7	
NW	.9	.7	*	.0	.0	.0		1.7	4.0	.8	.0	2.5	2.9	2.2	.0	1.1	1.2	
VAR	.0	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	8.3							8.3	.0	7.1	.0	10.4	13.2	10.1	.0	6.3	3.5	
TOT OBS	1921	3271	1212	91	12	0	6507		7.0		1023	18	1117	899	919	24	1859	648
TOT PCT	29.5	50.3	18.6	1.4	.2	.0		100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40					00 03	06 09	12 15	18 21
N	2.4	.4	.0	.0	.0	2.7	3.9	1.2	4.6	4.3	1.3	
NE	1.0	.1	.0	.0	.0	1.2	3.8	.6	1.4	2.6	.6	
E	1.1	.2	*	.0	.0	1.4	4.9	.7	1.7	2.8	.9	
SE	7.6	8.9	2.1	.1	*	18.7	9.0	17.0	18.1	21.8	18.7	
S	23.6	23.2	3.6	.2	.1	50.7	8.1	56.1	45.1	43.8	55.4	
SW	8.0	4.8	.3	*	.0	13.2	6.4	14.6	11.7	11.4	14.5	
W	1.9	.2	.0	.0	.0	2.1	3.7	2.0	3.0	1.3	1.7	
NW	1.5	.2	.0	.0	.0	1.7	4.0	.8	2.7	2.2	1.1	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	8.3					8.3	.0	7.0	11.7	9.9	5.6	
TOT OBS	3613	2476	390	20	8	6507		7.0	1041	2016	943	2507
TOT PCT	55.5	38.1	6.0	.3	.1		100.0		100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1864-1977

OCTOBER

AREA 0030 ANTOFAGASTA
21.95 71.6W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47					
0000	7.0	15.9	50.5	23.9	2.6	.1	.0	.0	8.0	100.0	1041
0600	11.7	26.4	47.0	13.2	1.4	.3	.0	.0	6.0	100.0	2016
1200	9.9	26.9	46.2	16.1	.5	.3	.0	.0	6.2	100.0	943
1800	5.6	17.1	54.9	21.7	1.2	.1	.0	.0	7.6	100.0	2507
TOT	541	1380	3271	1212	91	12	0	7.0			6507
PCT	8.3	21.2	50.3	18.6	1.4	.2	.0		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.2	.0	.3	1.3		7.3
NE	.0	.0	.2	.6		7.5
E	.0	.2	.3	.3		6.0
SE	1.0	1.4	5.4	12.0		6.9
S	7.2	5.3	14.4	30.4		6.3
SW	1.6	1.6	3.1	6.3		6.0
W	.1	.3	.1	.3		5.0
NW	.2	.2	.2	.6		6.2
VAR	.0	.0	.0	.0		.0
CALM	.2	.3	1.1	3.8		7.2
TOT OBS	68	61	165	366	660	6.4
TOT PCT	10.3	9.2	25.0	55.5	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
149	299	599	999	1999	3499	4999	6499	7999			
.0	.0	.0	.0	1.1	.4	.0	.0	.0	.0	.2	
.0	.0	.0	.0	.4	.3	.0	.0	.0	.0	.0	
.0	.0	.0	.0	.4	.1	.0	.0	.0	.0	.2	
.0	.0	.1	2.2	8.5	4.0	.7	.0	.0	.0	3.6	
.0	.3	.4	7.6	20.1	8.8	1.7	1.4	.2	.4	16.4	
.2	.0	.2	.9	4.3	2.0	.3	.0	.5	*	4.3	
.0	.0	.0	.0	.1	.3	.0	.0	.0	.0	.4	
.0	.0	.0	.0	.5	.2	.2	.0	.0	.0	.3	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
.0	.0	.0	1.1	2.0	1.1	.0	.0	.0	.5	.8	
1	2	4	78	247	113	19	14	4	6	172	660
.2	.3	.6	11.8	37.4	17.1	2.9	2.1	.6	.9	26.1	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
>6500	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6
>5000	3.2	3.7	3.7	3.7	3.7	3.7	3.7	3.7
>3500	5.9	6.5	6.5	6.5	6.5	6.5	6.5	6.5
>2000	21.6	23.7	23.8	23.8	23.8	23.8	23.8	23.8
>1000	58.1	61.6	61.8	61.8	61.8	61.8	61.8	61.8
>600	69.0	73.1	73.4	73.4	73.4	73.4	73.4	73.4
>300	69.6	73.7	74.0	74.0	74.0	74.0	74.0	74.0
>150	69.7	74.0	74.3	74.3	74.3	74.3	74.3	74.3
>0	69.9	74.1	74.4	74.4	74.4	74.4	74.4	74.4
TOTAL	475	504	506	506	506	506	506	506

TOTAL NUMBER OF OBSI 680

PCT FREQ NH <5/8 25.6

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
4.9	4.8	4.5	6.1	4.9	4.9	9.9	8.8	51.2	.0	736

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1864-1977

OCTUBER

AREA 0030 ANTOFAGASTA
21.9S 71.6W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
2<5	PCP	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	
	NO PCP	.2	.0	.0	.1	.2	.0	.0	.0	.0	.1	.6	
	TOT %	.2	.0	.0	.1	.2	.1	.0	.0	.0	.1	.7	
5<10	PCP	.0	.0	.0	.0	.2	.1	.1	.0	.0	.0	.5	
	NO PCP	1.2	.1	.0	2.8	8.3	1.3	.3	.3	.0	.2	14.6	
	TOT %	1.2	.1	.0	2.8	8.5	1.4	.3	.3	.0	.2	15.0	
10+	PCP	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.5	
	NO PCP	1.0	.5	.6	15.9	49.2	10.4	1.1	.9	.0	4.3	83.8	
	TOT %	1.0	.5	.6	15.9	49.5	10.6	1.1	.9	.0	4.3	84.3	
TOT OBS													884
TOT PCT		2.4	.6	.6	16.7	58.2	12.1	1.6	1.2	.0	4.6	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
2<5	0-3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2	.4	
	4-10	.0	.0	.0	.3	.3	.1	.0	.0	.0	.0	.7	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.2	.0	.0	.3	.3	.1	.0	.0	.0	.2	1.1	
5<10	0-3	.7	.1	.1	.*	1.6	.4	.2	.*	.0	1.4	4.5	
	4-10	.3	.0	.1	1.4	3.9	1.4	.2	.2	.0	.0	7.4	
	11-21	.1	.0	.0	.9	1.4	.1	.0	.*	.0	.0	2.7	
	22+	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	
	TOT %	1.1	.1	.2	2.3	7.3	2.0	.4	.2	.0	1.4	14.9	
10+	0-3	.4	.3	.1	.6	5.4	1.4	.5	.6	.0	8.4	17.8	
	4-10	1.1	.3	.1	6.0	24.3	9.2	.8	.5	.0	.0	42.5	
	11-21	.*	.0	.2	5.4	13.9	2.4	.1	.1	.0	.0	22.2	
	22+	.0	.0	.0	.5	1.0	.*	.0	.0	.0	.0	1.5	
	TOT %	1.5	.6	.5	12.5	44.6	13.1	1.4	1.2	.0	8.4	84.0	
TOT OBS													1243
TOT PCT		2.8	.7	.6	15.2	52.2	15.2	1.8	1.4	.0	10.1	100.0	

OCTOBER

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1864-1977AREA 0030 ANTOFAGASTA
21.95 71.6W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	.0	1.2	.0	12.1	32.7	16.4	3.0	1.2	.6	.6	67.9	32.1	165
06009	.0	.0	1.7	11.6	41.4	16.6	1.7	.0	.6	2.2	75.7	24.3	181
12015	.0	.0	.6	13.6	44.6	21.5	3.4	2.3	.6	1.1	87.6	12.4	177
18021	.6	.0	.0	8.3	29.6	14.2	3.0	4.7	.6	.0	60.9	39.1	169
TOT	1	2	4	79	258	119	19	14	4	7	507	185	692
PCT	.1	.3	.6	11.4	37.3	17.2	2.7	2.0	.6	1.0	73.3	26.7	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.0	1.0	14.9	84.1	289
06009	.0	.0	.0	1.4	20.6	78.0	436
12015	.0	.0	.0	1.5	12.3	86.2	260
18021	.0	.0	.0	.3	12.6	87.1	294
TOT	0	0	0	14	202	1063	1279
PCT	.0	.0	.0	1.1	15.8	83.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOUR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.0	1.2	13.6	55.6	30.9	162
06009	.0	1.7	14.0	62.4	23.6	178
12015	.0	.6	14.2	73.9	11.9	176
18021	.6	.6	9.1	53.7	37.2	164
TOT	1	7	87	419	174	680
PCT	.1	1.0	12.8	61.6	25.6	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
75/79	.0	.0	.0	.0	.0	.1	.0	.0	1	.1
70/74	.0	.0	.7	.5	.7	.1	.2	.1	20	2.5
65/69	.0	.0	.0	.9	3.9	3.9	1.4	.1	83	10.2
60/64	.0	.0	.0	1.5	14.1	27.8	11.8	1.8	464	57.1
55/59	.0	.0	.0	.0	4.3	12.8	10.3	2.2	241	29.6
50/54	.0	.0	.0	.0	.0	.1	.2	.1	4	.5
TOTAL	0	0	6	23	188	365	195	36	813	100.0
PCT	.0	.0	.7	2.8	23.1	44.9	24.0	4.4		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
75/79	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
70/74	.1	.0	.1	.8	1.3	.1	.0	.0	.0	.0
65/69	.1	.0	.2	2.2	6.2	1.4	.1	.0	.0	.0
60/64	1.5	.6	.4	12.7	30.6	6.7	.4	.5	.0	3.6
55/59	.8	.0	.0	5.0	17.6	3.4	1.0	.5	.0	1.4
50/54	.0	.0	.0	.0	.1	.2	.1	.0	.0	.1
TOTAL	2.5	.6	.7	20.8	55.9	11.7	1.6	1.0	.0	5.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	70	68	66	61	57	56	52	61.1	1021
06009	72	66	64	60	56	54	50	60.0	2034
12015	75	68	66	61	57	55	51	60.9	928
18021	81	74	71	64	59	57	50	64.2	2329
TOT	81	72	68	61	57	55	50	61.9	6312

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.0	20.0	49.0	27.5	2.5	76	200		
06009	.0	.8	14.1	44.7	33.3	7.1	78	235		
12015	.0	2.1	24.9	49.2	19.0	4.8	75	189		
18021	.0	10.4	32.7	35.6	17.8	3.5	71	202		
TOT	0	29	189	377	212	39	75	846		

OCTOBER

PERIOD: (PRIMARY) 1906-1977
(OVER-ALL) 1864-1977AREA 0030 ANTDFAGASTA
21.95 71.6W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	TOT	W FOG	W0 F0G
17/19	.0	.0	.0	.1	.0	.0	1	.0	.1
14/16	.0	.0	.0	.0	.1	.0	1	.0	.1
11/13	.0	.0	.0	.0	.5	.2	6	.0	.7
9/10	.0	.0	.0	.2	.4	.2	7	.1	.7
7/8	.0	.0	.4	.5	.5	.0	11	.0	1.3
6	.0	.4	.4	.6	1.2	.0	21	.0	2.5
5	.0	.2	.1	2.0	.2	.0	22	.0	2.6
4	.0	.1	1.5	1.2	.0	.0	24	.1	2.7
3	.2	.8	1.4	.8	.1	.0	29	.0	3.4
2	.1	1.8	3.0	1.1	.1	.0	51	.0	6.1
1	.2	1.9	5.2	1.1	.0	.0	71	.1	8.3
0	.1	6.7	10.1	.5	.1	.0	147	.4	17.1
=1	.1	7.5	5.8	.4	.0	.0	114	.0	13.5
=2	.4	8.0	6.8	.2	.1	.0	130	.0	15.4
=3	.4	9.7	3.1	.4	.2	.0	116	.1	13.7
=4	.4	3.8	1.5	.0	.0	.0	48	.0	5.7
=5	.2	2.3	1.0	.0	.0	.0	29	.0	3.4
=6	.4	.7	.1	.0	.0	.0	10	.1	1.1
=7/-8	.2	.1	.0	.0	.0	.0	3	.0	.4
=11/-13	.0	.1	.0	.0	.0	.0	1	.0	.1
TOTAL	23	371	338	76	30	4	842	8	834
PCT	2.7	44.1	40.1	9.0	3.6	.5	100.0	1.0	99.0

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.6	.0	.0	.0	.0	.0	.6	.3	.3	.0	.0	.0	.0	.6
1-2	.0	.8	.0	.0	.0	.0	.8	.0	.1	.0	.0	.0	.0	.1
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.6	.8	.0	.0	.0	.0	1.4	.3	.4	.0	.0	.0	.0	.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.3	.0	.0	.0	.0	.0	.3	.0	1.0	.0	.0	.0	.0	1.0
1-2	.0	.2	.0	.0	.0	.0	.2	.4	4.1	1.0	.0	.0	.0	5.5
3-4	.0	.0	.3	.0	.0	.0	.3	.3	2.8	2.5	.0	.0	.0	5.5
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.6	1.6	.3	.0	.0	2.5
7	.0	.0	.0	.0	.0	.0	.0	.0	.3	.7	.9	.0	.0	1.9
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.3	.2	.3	.0	.0	.0	.8	.7	8.8	5.7	1.2	.0	.0	16.4

PERIOD: (OVER-ALL) 1963-1977

OCTOBER

AREA 0030 ANTOFAGASTA
21.95 71.6W

TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	3.0	4.7	.0	.0	.0	.0	7.7	1.2	1.5	.0	.0	.0	.0	2.7
1-2	1.8	14.7	5.1	.0	.0	.0	21.6	.7	4.5	.4	.0	.0	.0	5.7
3-4	.0	7.7	11.0	.3	.0	.0	19.0	.0	1.7	1.7	.0	.0	.0	3.4
5-6	.0	2.0	3.2	.3	.0	.0	5.5	.0	.4	.9	.0	.0	.0	1.3
7	.0	.3	2.8	.3	.0	.0	3.3	.0	.0	.1	.0	.0	.0	.1
8-9	.0	.0	.6	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.6	.2	.0	.0	.8	.0	.0	.0	.1	.0	.0	.1
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	4.8	29.4	23.3	1.1	.0	.0	58.6	1.9	8.0	3.2	.1	.0	.0	13.2

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.2	.0	.0	.0	.0	.2	.3	.6	.0	.0	.0	.0	.9	
1-2	.9	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0	
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.9	.2	.0	.0	.0	.0	1.1	.3	.6	.0	.0	.0	.0	.9	93.2

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	13.7	8.5	.0	.0	.0	.0	22.2	
1-2	4.8	23.6	6.3	.0	.0	.0	34.6	
3-4	.3	12.3	14.8	.3	.0	.0	27.6	
5-6	.0	2.8	5.4	.6	.0	.0	8.8	
7	.0	.6	3.4	1.1	.0	.0	5.1	
8-9	.0	.0	.6	.0	.0	.0	.6	
10-11	.0	.0	.6	.3	.0	.0	.9	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	18.8	47.9	31.1	2.3	.0	.0	100.0	351

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.8	8.2	11.3	4.4	1.2	.5	.2	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	177	3
6-7	.3	2.5	8.4	13.3	4.1	1.6	1.6	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	197	5
8-9	.0	1.5	2.6	5.9	5.3	3.8	1.5	.3	.8	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	133	6
10-11	.0	.2	.7	1.0	2.5	.5	.7	.3	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	37	7
13-16	.0	.0	.3	.3	.5	.2	.2	.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	8
17-19	.0	.0	.0	.2	.5	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	8
20-22	1.3	1.6	2.3	1.3	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	45	3
TOTAL	27	85	156	161	90	41	25	10	12	1	0	0	0	0	0	0	0	0	0	608	5
PCT	4.4	14.0	25.7	26.5	14.8	6.7	4.1	1.6	2.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1905-1977
(OVER-ALL) 1871-1977

NOVEMBER

AREA 0030 ANTOFAGASTA
21.85 71.7W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							NO SIG WEA
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	
N	.0	.0	.0	.0	.0	.0	.0	.0	6.4	.0	.0	.0	.0	.0	93.6
NE	.0	.0	.0	.0	.0	.0	.0	.0	4.8	.0	.0	.0	.0	.0	95.2
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.0	.7	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	99.3
S	.0	.0	.5	.0	.0	.0	.0	.5	.4	.0	.1	.0	.7	.0	98.3
SW	.7	.0	.9	.0	.0	.0	.0	1.6	.0	.0	.2	.0	.9	.0	97.3
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.4	.0	.0	4.1	.0	90.5
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0	.0	96.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	2.0	.0	.0	.0	.0	2.0	2.0	.0	.0	.0	.0	.0	96.1
TOT PCT	.1	.0	.6	.0	.0	.0	.0	.8	.4	.1	.1	.0	.6	.0	97.9
TOT OBS:	924														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							NO SIG WEA
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	
00003	.0	.0	1.3	.0	.0	.0	.0	1.3	.0	.0	.0	.0	.4	.0	98.3
06009	.4	.0	1.1	.0	.0	.0	.0	1.4	.4	.4	.4	.0	1.8	.0	95.7
12015	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	99.1
18021	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	99.5
TOT PCT	.1	.0	.6	.0	.0	.0	.0	.7	.4	.1	.1	.0	.6	.0	98.0
TOT OBS:	949														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21
N	.9	.8	*	.0	.0	.0	1.6	4.0	.8	.0	3.1	3.4	1.8	.0	.6	.8	
NE	.6	.5	*	.0	.0	.0	1.1	3.7	.3	.0	1.6	3.4	1.1	.0	.4	.4	
E	.7	.8	.1	*	.0	.0	1.7	5.0	.5	.0	2.1	4.2	2.6	.0	1.0	.4	
SE	3.2	10.4	4.4	.2	.0	.0	18.3	8.1	14.9	22.2	18.1	21.1	24.6	18.2	16.2	16.5	
S	10.5	31.7	9.6	.5	.0	.0	52.2	7.4	60.2	55.6	48.5	38.4	46.0	55.7	57.1	60.3	
SW	4.0	8.3	1.0	.1	.0	.0	13.3	5.8	15.9	11.1	12.0	9.2	8.7	12.5	16.2	15.9	
W	1.1	.8	*	.0	.0	.0	2.0	3.7	1.5	.0	2.3	1.9	2.7	.0	2.0	1.4	
NW	.8	.7	*	.0	.0	.0	1.5	3.8	.7	.0	2.3	3.1	1.4	4.5	.9	.7	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	8.2						8.2	.0	5.2	11.1	10.2	15.3	11.1	9.1	5.4	3.6	
TOT OBS	1783	3711	909	45	0	0	5948		947	18	1040	829	838	22	1693	561	
TOT PCT	30.0	54.0	15.3	.8	.0	.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WNO DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
	0-6	7-16	17-27	28-40	41+				00 03	06 09	12 15	18 21
N	1.4	.2	*	.0	.0		1.6	4.0	.8	3.2	1.7	.7
NE	1.0	.1	.0	.0	.0		1.1	3.7	.3	2.4	1.1	.4
E	1.4	.3	*	.0	.0		1.7	5.0	.5	3.0	2.6	.9
SE	8.1	8.9	1.3	*	.0		18.3	8.1	15.1	19.4	24.5	16.3
S	26.5	23.4	2.2	.1	.0		52.2	7.4	60.1	44.0	46.2	57.9
SW	9.0	4.2	.2	.0	.0		13.3	5.8	15.8	10.7	8.8	16.1
W	1.8	.2	.0	.0	.0		2.0	3.7	1.5	2.1	2.6	1.8
NW	1.3	.2	.0	.0	.0		1.5	3.8	.7	2.6	1.5	.9
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	8.2						8.2	.0	5.3	12.5	11.0	4.9
TOT OBS	3493	2226	220	9	0	5948		6.5	965	1869	860	2254
TOT PCT	58.7	37.4	3.7	.2	.0		100.0		100.0	100.0	100.0	100.0

NOVEMBER

PERIOD: (PRIMARY) 1905-1977
(OVER-ALL) 1871-1977

AREA 0030 ANTOFAGASTA
21.8S 71.7W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47	48+			
00003	5.3	14.5	56.9	22.1	1.2	.0	.0	7.7	100.0	965
06009	12.5	27.7	48.0	11.2	.6	.0	.0	5.4	100.0	1869
12015	11.0	26.0	49.8	12.6	.6	.0	.0	5.8	100.0	860
18021	4.9	18.3	59.3	16.8	.7	.0	.0	7.0	100.0	2254
TOT	490	1293	3211	909	.45	0	0	6.5		5948
PCT	8.2	21.7	54.0	15.3	.8	.0	.0	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & ObsCD	TOTAL OBS	MEAN CLOUD COVER
N	.0	.1	.0	.5		7.2
NE	.1	.1	.0	.1		3.2
E	.5	.0	.2	.4		4.7
SE	1.3	.6	4.1	11.6		7.0
S	7.8	5.1	13.6	33.9		6.4
SW	3.1	.8	3.0	6.9		5.8
W	.0	.2	.1	.9		6.9
NW	.0	.0	.0	.3		7.6
VAR	.0	.0	.0	.0		7.0
CALM	.3	.1	1.4	2.6	733	6.4
TOT OBS	97	52	164	420		
TOT PCT	13.2	7.1	22.4	57.3	100.0	

TABLE 5

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
149	299	599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
.0	.0	.0	.0	.1	.2	.0	.0	.1	.0	.1	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
.0	.0	.0	.0	.4	.3	.0	.0	.0	.0	.0	.5
.0	.0	.2	2.6	6.4	4.5	.8	.2	.0	.0	.0	2.8
.0	.1	.8	7.9	16.5	12.3	4.1	.6	.2	.1	.1	17.7
.0	.0	.1	2.4	3.5	2.2	.6	.1	.3	.0	.0	4.5
.0	.0	.0	.0	.9	.1	.0	.0	.0	.0	.0	.2
.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.1	.8	1.4	1.1	.1	.0	.0	.0	.0	.7
.0	.1	.9	10.1	21.5	15.5	4.1	.7	.5	.2	.1	19.7
.0	.1	1.2	13.8	29.3	21.1	5.6	1.0	.7	.3	.0	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	>10	>5	>2	>1	>1/2	>1/4	>50YD	>0
# NH >6500	.9	.9	1.1	1.1	1.1	1.1	1.1	1.1
# NH >5000	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
# NH >3500	6.8	7.4	7.8	7.8	7.8	7.8	7.8	7.8
# NH >2000	26.1	28.5	29.0	29.0	29.0	29.0	29.0	29.0
# NH >1000	53.1	57.7	58.2	58.2	58.2	58.2	58.2	58.2
# NH >600	65.7	71.2	71.8	71.8	71.8	71.8	71.8	71.8
# NH >300	66.7	72.4	73.0	73.0	73.0	73.0	73.0	73.0
# NH >150	66.8	72.6	73.1	73.1	73.1	73.1	73.1	73.1
# NH >0	66.8	72.6	73.1	73.1	73.1	73.1	73.1	73.1
TOTAL	499	542	546	546	546	546	546	546

TOTAL NUMBER OF OBS: 747

PCT FREQ NH <5/8: 26.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8	ObsCD	TOTAL OBS
5.2	6.4	5.9	4.1	4.8	3.0	6.4	12.1	52.2	.0	811

PERIOD: (PRIMARY) 1905-1977
(OVER-ALL) 1871-1977

NOVEMBER

AREA 0030 ANTOFAGASTA
21.85 71.7W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	NO PCP	.1	*	.0	.1	.1	.1	.0	.0	.0	.0	.4	.4
	TOT %	.1	*	.0	.1	.1	.1	.0	.0	.0	.0	.4	.4
5<10	PCP	.0	.0	.0	.1	.1	.2	.0	.0	.0	.1	.5	.5
	NO PCP	.7	.1	.2	1.0	3.9	1.9	.7	.3	.0	1.2	10.1	10.1
	TOT %	.7	.1	.2	1.1	4.0	2.2	.7	.3	.0	1.3	10.6	10.6
10+	PCP	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	.2
	NO PCP	.5	.4	.9	13.9	54.5	12.6	1.3	.4	.0	4.2	88.7	88.7
	TOT %	.5	.4	.9	13.9	54.7	12.6	1.3	.4	.0	4.2	88.9	88.9
TOT OBS													922
TOT PCT		1.3	.6	1.2	15.2	58.8	14.8	2.0	.7	.0	5.5	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2<5	0-3	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.2	.2
	4-10	.1	*	.0	.0	.0	.1	.0	.1	.0	.0	.3	.3
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.1	*	.0	.1	.1	.1	.0	.1	.0	.0	.4	.4
5<10	0-3	.1	.0	.1	.1	.5	.7	.1	.1	.0	1.7	3.4	3.4
	4-10	.6	.1	.1	.8	2.8	1.6	.3	.3	.0	.0	6.8	6.8
	11-21	.0	.0	.1	.3	1.3	.2	.0	.0	.0	.0	1.8	1.8
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	TOT %	.7	.1	.2	1.2	4.5	2.5	.6	.4	.0	1.7	12.0	12.0
10+	0-3	.1	*	.3	1.0	5.7	3.3	.4	.3	.0	6.2	17.4	17.4
	4-10	.3	.4	.7	7.2	31.6	10.0	.9	.4	.0	.0	51.6	51.6
	11-21	.1	.0	.2	3.6	12.5	1.5	.1	.0	.0	.0	18.0	18.0
	22+	.0	.0	.0	.2	.4	.0	.0	.0	.0	.0	.6	.6
	TOT %	.5	.5	1.2	12.0	50.1	14.9	1.4	.8	.0	6.2	87.6	87.6
TOT OBS													1197
TOT PCT		1.3	.6	1.4	13.3	54.7	17.5	2.0	1.3	.0	7.9	100.0	

PERIOD: (PRIMARY) 1905-1977
(OVER-ALL) 1871-1977

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET) NH >4/8) AND
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	.0	.0	.5	10.6	25.1	20.6	4.0	1.0	.5	.0	62.3	37.7	199
06009	.0	.0	1.0	18.3	32.0	24.4	4.1	.5	.0	.5	80.7	19.3	197
12015	.0	.5	2.0	12.8	34.2	20.9	7.7	1.5	1.0	1.0	81.6	18.4	196
18021	.0	.0	1.2	11.2	23.1	17.2	7.1	.6	1.2	.0	61.5	38.5	169
TOT	0	1	9	101	219	159	43	7	5	3	547	214	761
PCT	.0	.1	1.2	13.3	28.8	20.9	5.7	.9	.7	.4	71.9	28.1	100.0

TABLE 11

PERCENT FREQUENCY VS BY (NH) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.0	.0	10.3	89.7	290
06009	.0	.0	.0	.5	18.0	81.5	401
12015	.0	.0	.0	.8	7.5	91.7	265
18021	.0	.0	.0	.4	9.4	90.2	266
TOT	0	0	0	3	147	1070	1222
PCT	.0	.0	.0	.4	12.0	87.6	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VS BY (NH) AND/OR
CEILING HGT (FEET) NH >4/8) BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	.0	.5	11.3	52.6	36.1	194
06009	.0	1.0	20.4	60.2	19.4	196
12015	.0	2.6	16.1	66.8	17.1	193
18021	.0	1.2	13.4	50.0	36.6	164
TOT	0	10	115	431	201	747
PCT	.0	1.3	15.4	57.7	26.9	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
75/79	.0	.0	.0	.2	.0	.1	.0	.0	3	.4
70/74	.0	.1	.1	.6	.6	.5	.4	.1	20	2.4
65/69	.0	.0	.0	.9	8.1	10.3	4.1	1.3	204	24.8
60/64	.0	.0	.0	.2	14.0	28.1	15.8	4.5	515	62.6
55/59	.0	.0	.0	.0	.7	4.1	4.4	.6	81	9.8
TOTAL	0	1	1	16	193	355	203	54	823	100.0
PCT	.0	.1	.1	1.9	23.5	43.1	24.7	6.6		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.1	.1	.1	.0	.0	.0	.0
.0	.0	.0	.3	1.1	.5	.0	.0	.0	.5
.6	.0	.3	3.9	14.2	4.1	.7	.0	.0	1.0
.9	.4	.9	10.6	34.2	9.0	1.3	.7	.0	4.6
.2	.1	.0	1.2	5.7	1.7	.4	.2	.0	.5
1.7	.5	1.2	16.1	55.3	15.4	2.4	.9	.0	6.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	81	71	68	64	59	58	51	63.7	950
06009	81	69	67	63	58	56	54	62.6	1876
12015	82	73	69	63	59	57	53	63.5	849
18021	81	77	74	67	61	59	55	67.0	2119
TOT	82	75	72	64	59	57	51	64.5	5794

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.5	17.0	45.9	28.9	7.8	77	218
06009	.0	.4	17.1	46.8	28.6	7.1	77	232
12015	.0	1.4	29.2	42.1	21.1	6.2	75	209
18021	.0	8.3	36.3	36.3	15.5	3.6	71	168
TOT	0	19	202	367	205	54	75	847

PERIOD: (PRIMARY) 1905-1977
(OVER-ALL) 1871-1977

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	77 80	81 84	TOT	W FOG	WD FOG
14/16	.0	.0	.0	.2	.0	.0	.1	.0	3	.0	.3
11/13	.0	.0	.1	.0	.0	.1	.0	.0	2	.0	.2
9/10	.0	.1	.0	.2	.1	.5	.1	.0	9	.0	1.0
7/8	.0	.1	.1	.3	.3	.5	.0	.0	12	.0	1.4
6	.0	.0	.1	.7	.2	.0	.0	.0	9	.0	1.0
5	.0	.0	.2	.5	.5	.1	.0	.0	11	.0	1.3
4	.0	.1	.6	1.0	.7	.0	.0	.1	22	.0	2.6
3	.0	.1	1.0	1.4	.7	.0	.0	.0	28	.0	3.3
2	.0	.5	2.9	3.4	.2	.1	.0	.0	61	.0	7.1
1	.0	.7	4.5	4.8	.1	.0	.0	.0	87	.0	10.1
0	.0	1.7	8.9	4.2	.3	.0	.0	.0	130	.0	15.2
-1	.0	2.4	9.2	3.1	.1	.0	.0	.0	128	.0	14.9
-2	.1	4.4	8.6	2.3	.0	.0	.0	.0	133	.0	15.5
-3	.0	3.3	6.2	1.9	.1	.0	.0	.0	98	.1	11.3
-4	.0	1.4	4.8	1.2	.0	.0	.0	.0	63	.0	7.3
-5	.0	1.5	1.7	.7	.0	.0	.0	.0	34	.0	4.0
-6	.1	.8	1.0	.2	.0	.0	.0	.0	19	.0	2.2
-7/-8	.1	.2	.5	.1	.0	.0	.0	.0	8	.0	.9
-9/-10	.0	.1	.0	.0	.0	.0	.0	.0	1	.0	.1
TOTAL	3	151	434	226	30	11	2	1	858	1	857
PCT	.3	17.6	50.6	26.3	3.5	1.3	.2	.1	100.0	.1	99.9

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.3

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	.2	.0	.0	.0	.0	.0	.2	.1	.4	.0	.0	.0	.0	.5
1-2	.0	.2	.4	.0	.0	.0	.6	.8	2.5	.7	.0	.0	.0	4.1
3-4	.0	.0	.0	.0	.0	.0	.0	.0	2.8	2.3	.0	.0	.0	5.1
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.7	1.7	.0	.0	.0	2.4
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.1	.0	.0	.6
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.2	.2	.4	.0	.0	.0	.8	.9	6.3	5.2	.1	.0	.0	12.7

PERIOD: (OVER-ALL) 1963-1977

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TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	SW 22-33	34-47	48+	PCT
<1	1.4	3.7	.5	.0	.0	.0	5.6	.8	1.8	.1	.0	.0	.0	2.6
1-2	2.1	20.9	5.0	.0	.0	.0	28.1	2.3	6.0	.8	.0	.0	.0	9.0
3-4	.6	7.7	10.0	.3	.0	.0	18.5	.3	2.8	.6	.0	.0	.0	3.7
5-6	.0	2.1	6.9	.0	.0	.0	9.0	.0	.8	.5	.0	.0	.0	1.3
7	.0	.0	.6	.5	.0	.0	1.1	.0	.3	.0	.0	.0	.0	.3
8-9	.0	.2	.3	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	1.1	.0	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	4.1	34.6	24.4	.8	.0	.0	63.8	3.3	11.6	1.9	.0	.0	.0	16.9

HGT	1-3	4-10	11-21	W 22-33	34-47	48+	PCT	1-3	4-10	11-21	NW 22-33	34-47	48+	PCT	TOTAL PCT
<1	.0	.2	.0	.0	.0	.0	.2	.0	.3	.0	.0	.0	.0	.3	
1-2	.3	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	
3-4	.3	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.6	.2	.0	.0	.0	.0	.8	.0	.3	.0	.0	.0	.0	.3	95.6

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	8.6	7.0	.5	.0	.0	.0	16.1	
1-2	5.6	29.0	6.7	.0	.0	.0	41.3	
3-4	1.1	12.9	12.6	.3	.0	.0	26.8	
5-6	.0	3.5	8.8	.0	.0	.0	12.3	
7	.0	.3	1.1	.5	.0	.0	1.9	
8-9	.0	.3	.3	.0	.0	.0	.5	
10-11	.0	.0	1.1	.0	.0	.0	1.1	
12	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	15.3	52.8	31.1	.8	.0	.0	100.0	373

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	3.0	11.9	15.0	5.2	.9	.6	.7	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	253	3
6-7	.1	1.5	7.4	11.0	6.1	1.6	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	190	5
8-9	.3	.6	3.6	5.5	4.4	1.5	.9	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	114	6
10-11	.0	.6	2.2	2.2	1.2	.1	.6	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	51	5
12-13	.0	.0	.9	.7	.7	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	19	5
>13	.0	.0	.0	.4	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	7
INDET	2.2	.4	1.0	2.1	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	675	3
TOTAL	38	101	203	188	95	29	17	4	5	0	0	0	0	0	0	0	0	0	0	100.0	4
PCT	5.6	15.0	30.1	27.1	14.1	4.3	2.5	.6	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1868-1977

DECEMBER

AREA 0030 ANTOFAGASTA
22.05 71.7W

TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.7	.0	.0	.0	.0	93.3
E	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
SE	.0	.0	.7	.0	.0	.0	.0	.7	.3	.0	.0	.0	.0	.0	99.0
S	.1	.0	.0	.0	.0	.0	.0	.1	.4	.0	.0	.0	.3	.0	99.1
SW	.2	.0	.0	.0	.0	.0	.0	.2	.9	.0	.0	.0	.9	.0	98.1
W	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.7	.0	91.3
NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.0	98.6
TOT PCT	.1	.0	.1	.0	.0	.0	.0	.2	.4	.1	.0	.0	.5	.0	98.8
TOT OBS:	966														

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THDR LTNG	FGG WD PCPN	FGG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00003	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.9	.0	98.7
06009	.4	.0	.4	.0	.0	.0	.0	.7	.0	.4	.0	.0	.4	.0	98.6
12015	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	.0	.0	.4	.0	98.4
18021	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	99.6
TOT PCT	.1	.0	.1	.0	.0	.0	.0	.2	.4	.1	.0	.0	.5	.0	98.8
TOT OBS:	989														

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						
	0-3	4-10	11-21	22-33	34-47	48+	00				03	06	09	12	15	18	21
N	1.2	.6	*	*	.0	.0	1.8	3.6	.4	2.9	2.4	4.4	2.3	.0	1.1	.6	
NE	.6	.7	*	*	.0	.0	1.3	4.3	.5	1.9	1.3	2.8	2.4	2.9	.7	.5	
E	1.0	.9	.1	.0	.0	.0	2.0	4.4	.8	3.8	2.8	3.8	2.4	2.2	1.7	.4	
SE	2.6	10.9	3.3	.2	.0	.0	17.0	7.7	15.8	21.2	17.1	19.2	20.6	22.8	15.3	15.0	
S	10.3	33.0	9.2	.3	.0	.0	52.9	7.3	60.0	44.2	48.7	43.1	49.0	58.8	55.5	60.7	
SW	4.0	8.1	1.0	*	.0	.0	13.1	5.8	14.0	21.2	11.2	8.3	9.1	7.4	16.8	17.1	
W	.8	.8	*	.0	.0	.0	1.6	4.2	2.2	.0	1.6	1.6	.9	2.9	1.6	1.9	
NW	.6	.6	*	.0	.0	.0	1.2	4.0	.9	1.0	1.6	1.3	1.6	.0	1.0	.5	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	9.1						9.1	.0	5.4	3.8	13.3	15.6	11.7	2.9	6.3	3.3	
TOT OBS	1700	3138	776	32	0	0	5646		892	26	1005	774	789	34	1577	549	
TOT PCT	30.1	55.6	13.7	.6	.0	.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)			
		7-16	17-27	28-40	00 03					06 09	12 15	18 21	
N	1.6	.2	*	.0	.0		1.8	3.6	.5	3.3	2.2	1.0	
NE	1.1	.2	*	.0	.0		1.3	4.3	.6	2.0	2.5	.6	
E	1.7	.2	.1	.0	.0		2.0	4.4	.9	3.2	2.4	1.4	
SE	8.3	7.7	1.0	*	.0		17.0	7.7	15.9	18.0	20.7	15.2	
S	27.9	22.7	2.2	.1	.0		52.9	7.3	59.6	46.2	49.5	56.9	
SW	8.8	4.2	.1	*	.0		13.1	5.8	14.2	9.9	9.0	16.9	
W	1.4	.2	.0	.0	.0		1.6	4.2	2.1	1.6	.9	1.7	
NW	1.0	.1	*	.0	.0		1.2	4.0	.9	1.5	1.5	.9	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	9.1						9.1	.0	5.3	14.3	11.3	5.5	
TOT OBS	3443	2004	191	8	0	5646		6.2	918	1779	823	2126	
TOT PCT	61.0	35.5	3.4	.1	.0		100.0		100.0	100.0	100.0	100.0	

DECEMBER

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1808-1977

AREA 0030 ANTDFAGASTA
22.05 71.7W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	1-3	4-10	WIND SPEED (KNOTS)				48+	MEAN	PCT FREQ	TOTAL OBS
				11-21	22-33	34-47					
0000	5.3	16.0	58.0	19.7	1.0	.0	.0	.0	7.4	100.0	918
0600	14.3	25.0	51.0	9.4	.3	.0	.0	.0	5.2	100.0	1779
1200	11.3	24.9	51.4	11.8	.6	.0	.0	.0	5.7	100.0	823
1800	5.5	18.3	60.0	15.6	.6	.0	.0	.0	6.8	100.0	2126
TOT	514	1186	3128	776	32	0	0	0	6.2		5646
PCT	9.1	21.0	55.6	13.7	.6	.0	.0	.0		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.2	.0	.1	.4		5.7
NE	.2	.0	.3	.6		6.6
E	.2	.0	.8	.6		6.5
SE	.8	1.8	5.8	6.7		6.5
S	10.8	7.1	15.3	25.1		5.7
SW	2.5	2.2	4.0	4.6		5.4
W	.1	.0	.5	.4		6.7
NW	.1	.1	.4	.0		5.4
VAR	.0	.0	.0	.0		.0
CALM	1.4	1.6	2.3	2.7		5.4
TOT OBS	114	90	207	288	699	5.8
TOT PCT	16.3	12.9	29.6	41.2	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NM >4/8)
AND OCCURRENCE OF NM <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NM <5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999			
N	.0	.0	.0	.0	.3	.3	.0	.0	.0	.0	.2	
NE	.0	.0	.0	.3	.4	.8	.0	.0	.0	.0	.3	
E	.0	.0	.0	.0	.5	.8	.1	.0	.0	.0	.3	
SE	.0	.0	.5	.8	5.3	3.1	.5	.1	.0	.1	4.7	
S	.1	.0	.8	5.2	16.8	7.0	2.5	.3	.1	.3	25.1	
SW	.0	.0	.0	1.1	3.9	1.9	.3	.0	.0	.1	6.2	
W	.0	.0	.0	.1	.5	.1	.1	.0	.0	.0	.1	
NW	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.3	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	.0	.0	.7	2.1	.9	.6	.0	.0	.0	3.7	
TOT OBS	1	0	9	58	209	99	29	3	1	4	286	699
TOT PCT	.1	.0	1.3	8.3	29.9	14.2	4.1	.4	.1	.6	40.9	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NM >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.7	.8	.8	.8	.8	.8	.8	.8
= OR >5000	1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3
= OR >3500	5.1	5.3	5.3	5.3	5.3	5.3	5.3	5.3
= OR >2000	18.4	19.2	19.2	19.2	19.2	19.2	19.2	19.2
= OR >1000	45.4	49.0	49.0	49.0	49.0	49.0	49.0	49.0
= OR >600	52.9	57.2	57.2	57.2	57.2	57.2	57.2	57.2
= OR >300	54.2	58.4	58.4	58.4	58.4	58.4	58.4	58.4
= OR >150	54.2	58.4	58.4	58.4	58.4	58.4	58.4	58.4
= OR >0	54.4	58.6	58.6	58.6	58.6	58.6	58.6	58.6
TOTAL	387	417	417	417	417	417	417	417

TOTAL NUMBER OF OBS 712

PCT FREQ NM <5/8 41.4

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
8.2	9.0	8.2	8.9	6.8	4.8	7.2	14.2	32.7	790

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1868-1977

DECEMBER

AREA 0090 ANTOFAGASTA
22.05 71.7W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
2<5	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.1	
	TOT %	.0	.0	.0	.0	.1	*	.0	.0	.0	.0	.1	
5<10	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.8	.3	2.2	5.6	1.8	.3	.1	.0	.7	11.8	
	TOT %	.0	.8	.3	2.2	5.6	1.8	.3	.1	.0	.7	11.8	
10+	PCP	.0	.0	.0	.1	.1	*	.0	.0	.0	.0	.2	
	NO PCP	.5	.8	1.5	12.8	53.9	10.2	.9	.5	.0	6.6	87.9	
	TOT %	.5	.8	1.5	13.0	54.0	10.2	.9	.5	.0	6.6	88.1	
TOT OBS													965
TOT PCT		.5	1.6	1.8	15.2	59.7	12.1	1.2	.6	.0	7.4	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
2<5	0-3	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.2	
	4-10	.0	.0	.0	*	.3	*	.0	.0	.0	.0	.3	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.0	.0	*	.3	*	.0	.0	.0	.0	.5	
5<10	0-3	*	.2	.1	.3	1.5	.5	.1	*	.0	.9	3.5	
	4-10	.1	.4	.1	1.3	4.0	1.5	.1	.2	.0	.7	7.7	
	11-21	.0	*	.1	.4	.6	*	.0	.0	.0	.1	1.2	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	.6	.3	2.0	6.1	2.0	.2	.2	.0	.9	12.5	
10+	0-3	.5	.2	.4	1.1	5.6	2.4	.3	.3	.0	7.2	18.0	
	4-10	.7	.5	.8	7.2	31.2	6.6	.6	.4	.0	47.9	77.9	
	11-21	.1	.1	.2	3.4	15.2	1.6	.1	.1	.0	20.7	44.4	
	22+	.0	.0	.0	.0	.3	.1	.0	.0	.0	.0	.4	
	TOT %	1.3	.8	1.4	11.6	52.4	10.6	1.1	.8	.0	7.2	87.1	
TOT OBS													1244
TOT PCT		1.5	1.4	1.7	13.6	58.8	12.6	1.3	1.1	.0	8.0	100.0	

PERIOD: (PRIMARY) 1907-1977
(OVER-ALL) 1868-1977

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <3/8 BY HOUR

HOUR (GMT)	0'0 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <3/8 ANY HGT	TOTAL OBS
00003	.0	.0	2.1	8.5	26.5	12.2	4.2	.5	.0	.0	54.0	46.0	189
06009	.0	.0	2.7	7.7	34.4	11.5	4.4	.0	.0	1.6	62.3	37.7	183
12015	.0	.0	.0	7.1	32.5	20.3	4.1	1.0	.5	.0	65.5	34.5	197
18021	.6	.0	.0	8.0	20.1	9.2	2.9	.0	.0	1.1	42.0	58.0	174
TOT	1	0	9	58	212	100	29	3	1	5	418	325	743
PCT	.1	.0	1.2	7.8	28.5	13.5	3.9	.4	.1	.7	56.3	43.7	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.0	.0	.4	9.5	90.1	283
06009	.0	.0	.0	.5	16.5	83.0	411
12015	.0	.0	.0	1.0	12.9	86.0	286
18021	.0	.0	.0	.0	9.1	90.9	287
TOT	0	0	0	6	158	1103	1267
PCT	.0	.0	.0	.5	12.5	87.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8), BY HOUR

HOUR (GMT)	<150 <500	<600 <1	<1000 <5	1000+ AND 5+	NM <3/8 AND 5+	TOTAL OBS
00003	.0	2.2	11.0	45.3	43.6	181
06009	.0	2.8	10.7	53.4	36.0	178
12015	.0	.0	7.2	58.8	34.0	194
18021	.6	.6	9.4	36.5	54.1	159
TOT	1	10	68	349	295	712
PCT	.1	1.4	9.6	49.0	41.4	100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
80/84	.0	.0	.0	.1	.2	.1	.0	.0	4	.5
75/79	.0	.0	.1	.4	.7	1.1	.4	.1	25	3.0
70/74	.0	.0	.1	1.8	4.9	7.6	3.0	1.5	159	18.8
65/69	.0	.0	.0	1.2	9.7	25.2	11.6	3.3	431	51.1
60/64	.0	.0	.0	.1	3.3	10.8	8.8	3.4	223	26.4
55/59	.0	.0	.0	.0	.0	.0	.1	.1	2	.2
TOTAL	0	0	2	32	159	378	201	72	944	100.0
PCT	.0	.0	.2	3.8	18.8	44.8	23.8	8.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	.0	.4	.1	.0	.0	.0	.0
.0	.0	.4	.1	2.2	.3	.0	.0	.0	.0
.1	.5	.4	2.4	11.2	1.8	.1	.2	.0	2.0
.7	.4	1.3	8.4	27.1	7.2	.8	.6	.0	4.6
.0	.5	.1	4.1	16.5	3.1	.6	.1	.0	1.3
.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
.7	1.5	2.3	15.1	57.6	12.5	1.5	1.0	.0	7.9

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	86	74	72	67	63	61	57	66.9	894
06009	74	72	70	65	61	59	53	65.4	1771
12015	81	76	73	67	62	60	52	66.9	794
18021	84	81	77	70	64	62	52	70.5	1966
TOT	86	78	75	67	62	60	52	67.7	5425

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.8	12.5	51.0	27.5	7.5	77	200
06009	.0	.8	13.3	39.5	33.1	13.3	79	248
12015	.0	2.4	26.0	41.3	23.1	7.2	75	208
18021	.0	12.0	24.0	46.6	10.6	5.7	72	208
TOT	0	35	162	383	207	77	76	864

PERIOD: (PRIMARY) 1907-1977
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	53 56	57 60	61 64	65 68	69 72	73 76	77 80	81 84	TOT	N FOG	WD FOG
14/16	.0	.0	.0	.0	.1	.0	.0	.0	1	.0	.1
11/13	.0	.0	.0	.0	.2	.3	.0	.0	5	.0	.6
9/10	.0	.0	.0	.1	.9	.4	.3	.1	17	.0	1.9
7/8	.0	.0	.1	.6	.7	.6	.2	.1	20	.0	2.2
6	.0	.0	.0	.6	1.0	.3	.2	.1	20	.0	2.2
5	.0	.0	.0	.6	1.1	.4	.0	.0	19	.0	2.1
4	.0	.0	.3	.7	.7	.4	.1	.0	20	.0	2.2
3	.0	.0	.3	2.7	2.4	.3	.0	.0	52	.0	5.8
2	.0	.0	.8	4.3	2.0	.3	.2	.0	69	.0	7.6
1	.0	.0	2.4	6.1	2.0	.6	.0	.0	100	.0	11.1
0	.0	.1	4.2	8.9	2.9	.4	.0	.0	131	.0	14.5
-1	.0	.0	4.8	8.9	1.9	.3	.0	.0	125	.0	13.8
-2	.1	.4	5.0	7.2	3.0	.2	.0	.0	144	.0	15.9
-3	.0	.1	2.3	4.1	2.0	.3	.0	.0	80	.0	8.9
-4	.0	.3	2.3	2.3	.9	.1	.1	.0	55	.0	6.1
-5	.0	.2	1.4	.9	.4	.0	.0	.0	27	.0	3.0
-6	.0	.0	.2	.4	.1	.0	.0	.0	7	.0	.8
-7/-8	.0	.0	.7	.2	.1	.0	.0	.0	9	.0	1.0
-11/-13	.0	.1	.0	.0	.0	.0	.0	.0	1	.0	.1
-14/-16	.0	.0	.1	.0	.0	.0	.0	.0	1	.0	.1
TOTAL	1	12	226	401	201	48	11	3	903	0	903
PCT	.1	1.3	25.0	44.4	22.3	5.3	1.2	.3	100.0		100.0

PERIOD: (OVER-ALL) 1963-1977

TABLE 18

PCT FREQ OF WIND SPED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							PCT	NE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.3	.0	.0	.0	.0	.0	.3	.6	.0	.0	.0	.0	.0	.0	.0	.6
1-2	.2	.2	.2	.0	.0	.0	.6	.1	.1	.1	.0	.0	.0	.0	.0	.2
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.3
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.5	.2	.2	.0	.0	.0	.9	.6	.4	.1	.0	.0	.0	.0	.0	1.1

HGT	E							PCT	SE							PCT
	1-3	4-10	11-21	22-33	34-47	48+			1-3	4-10	11-21	22-33	34-47	48+		
<1	.3	.0	.0	.0	.0	.0	.3	.9	1.7	.0	.0	.0	.0	.0	.0	2.7
1-2	.0	.4	.0	.0	.0	.0	.4	.4	4.8	2.1	.0	.0	.0	.0	.0	7.3
3-4	.0	.0	.0	.0	.0	.0	.0	.0	2.4	2.7	.0	.0	.0	.0	.0	5.1
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.1	1.1	.0	.0	.0	.0	.0	1.1
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1
8-9	.0	.3	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.3	.7	.0	.0	.0	.0	1.0	1.3	9.0	6.0	.0	.0	.0	.0	.0	16.3

PERIOD: (OVER-ALL) 1963-1977

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TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	3.1	3.5	.0	.0	.0	.0	6.6	1.4	1.6	.3	.0	.0	.0	3.4
1-2	2.7	19.8	4.7	.0	.0	.0	27.1	1.0	4.4	.6	.0	.0	.0	6.1
3-4	.3	6.4	8.5	.2	.0	.0	15.3	.0	2.4	1.2	.1	.0	.0	3.7
5-6	.0	.5	4.3	.0	.0	.0	4.8	.0	.0	.0	.0	.0	.0	.1
7	.0	.2	.8	.0	.0	.0	1.0	.0	.1	.0	.0	.0	.0	.1
8-9	.0	.3	.3	.3	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	6.0	30.7	18.4	.8	.0	.0	56.0	2.4	8.6	2.2	.1	.0	.0	13.3

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.3	.0	.0	.0	.0	.0	.3	.0	.6	.0	.0	.0	.0	.6	
1-2	.0	.8	.0	.0	.0	.0	.8	.0	.1	.0	.0	.0	.0	.1	
3-4	.0	.0	.2	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.3	.8	.2	.0	.0	.0	1.3	.0	.6	.0	.0	.0	.0	.6	90.5

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT OBS
<1	17.4	7.3	.3	.0	.0	.0	25.0	
1-2	4.8	30.1	7.6	.0	.0	.0	42.4	
3-4	.3	11.0	2.4	.3	.0	.0	23.9	
5-6	.0	.8	5.3	.0	.0	.0	6.2	
7	.0	.3	.8	.0	.0	.0	1.1	
8-9	.0	.6	.3	.3	.0	.0	1.1	
10-11	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.3	.0	.0	.3	
13-16	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	22.5	50.0	26.7	.8	.0	.0	100.0	356

PERIOD: (OVER-ALL) 1949-1977

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.3	8.6	13.4	5.6	2.0	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	207	3
6-7	.0	1.1	9.2	11.1	4.2	1.2	.5	.3	.0	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	179	5
8-9	.0	.6	3.7	6.1	4.7	2.2	1.1	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	119	6
10-11	.0	.0	1.1	2.8	1.4	1.7	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	48	6
12-13	.0	.0	.6	.6	.0	.5	.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	6
>13	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	11
INDET	3.3	1.7	3.1	1.6	.5	.8	.2	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	71	3
TOTAL	36	77	200	178	82	42	18	.5	1	1	0	0	0	0	0	0	0	0	0	641	4
PCT	5.6	12.0	31.2	27.8	12.8	6.6	2.8	.8	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1905-1978
(OVER-ALL) 1853-1978

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TABLE 1

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
N	.0	.0	1.1	.0	.0	.0	.0	1.1	.5	.8	1.2	.0	.0	.0	96.3
NE	1.0	.0	1.6	.0	.0	.0	.0	2.6	.4	1.0	.3	.0	.5	.0	95.2
E	.6	.0	.6	.0	.0	.0	.0	1.2	.0	.0	.0	.0	.5	.0	98.3
SE	.2	.4	.5	.0	.0	.0	.0	1.0	.6	.0	.2	.0	.2	.0	98.1
S	.1	.1	.4	.0	.0	.0	.0	.5	.4	.1	.2	.0	.5	.0	98.3
SW	.2	.1	.9	.0	.0	.0	.0	1.2	.2	.0	.4	.0	1.3	.0	96.8
W	.0	.0	1.2	.0	.0	.0	.0	1.2	.0	.5	.5	.0	1.9	.0	96.0
NW	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.4	.0	1.6	.0	97.5
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.6	.0	.0	.0	.0	.6	.7	.0	.7	.0	2.7	.0	95.2
TOT PCT	.1	.1	.5	.0	.0	.0	.0	.7	.4	.1	.3	.0	.7	.0	97.7
TOT OBS: 12216															

TABLE 2

PERCENT FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	PRECIPITATION TYPE							OTHER WEATHER PHENOMENA							
	RAIN	RAIN SHWR	DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN	HAIL	PCPN AT DB TIME	PCPN PAST HOUR	THOR LTNG	FOG WD PCPN	FOG WD PCPN PAST HR	SMOKE HAZE	SPRAY BLWG DUST	NO SIG WEA
00003	.1	.1	.6	.0	.0	.0	.0	.7	.4	.0	.3	.0	.6	.0	97.9
06009	.1	.2	.9	.0	.0	.0	.0	1.3	.2	.4	.4	.0	.8	.0	97.0
12015	.2	.1	.5	.0	.0	.0	.0	.7	.8	.0	.4	.0	1.0	.0	97.2
18021	.0	.1	.2	.0	.0	.0	.0	.3	.2	.0	.2	.0	.5	.0	98.7
TOT PCT	.1	.1	.6	.0	.0	.0	.0	.8	.4	.1	.3	.0	.7	.0	97.7
TOT OBS: 12549															

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)							TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+					00	03	06	09	12	15	18	21
N	1.3	1.5	.2	.0	.0	.0		3.0	4.6		1.8	1.4	3.9	5.4	3.5	1.4	2.2	2.0
NE	.8	.9	.1	.0	.0	.0		1.8	4.4		.8	2.1	1.8	3.3	2.6	2.2	1.3	1.1
E	1.0	1.2	.2	.0	.0	.0		2.5	5.2		1.3	.3	2.5	4.3	3.7	1.8	2.2	.9
SE	3.0	10.5	4.9	.5	.0	.0		19.0	8.7		15.8	16.9	17.3	19.7	22.8	21.6	20.1	17.3
S	8.8	29.9	11.2	.9	.0	.0		49.8	8.1		56.2	57.0	47.8	40.6	45.7	54.1	52.0	55.6
SW	2.9	6.8	1.2	.1	.0	.0		11.0	6.3		13.3	15.3	10.3	7.7	8.0	10.4	12.3	14.3
W	.8	.8	.1	.0	.0	.0		1.7	4.2		1.9	.8	2.0	1.9	1.2	1.4	1.5	1.8
NW	.9	1.1	.1	.0	.0	.0		2.1	4.6		1.4	.9	2.5	2.7	1.7	.4	2.0	2.5
VAR	.0	.0	.0	.0	.0	.0		.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	9.1							9.1	.0		7.5	5.1	11.8	14.5	10.7	6.7	6.4	4.6
TOT OBS							60617				9745	288	11247	8266	8775	308	16571	5417
TOT PCT	28.9	51.8	17.8	1.4	.1	.0		100.0	6.9		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+				00 03	06 09	12 15	18 21	
N	2.4	.6	*	*	.0		3.0	4.6	1.8	4.6	3.5	2.1	
NE	1.4	.3	*	.0	.0		1.8	4.4	.8	2.4	2.6	1.3	
E	1.9	.5	1	*	.0		2.5	5.2	1.2	3.3	3.6	1.9	
SE	8.2	8.8	1.8	.1	*		19.0	8.7	15.9	18.3	22.8	19.4	
S	23.4	22.6	3.6	.2	*		49.8	8.1	56.2	44.7	45.9	52.9	
SW	6.9	3.8	.3	*	.0		11.0	6.3	13.3	9.2	8.1	12.8	
W	1.5	.2	*	.0	.0		1.7	4.2	1.9	2.0	1.3	1.6	
NW	1.6	.4	*	*	.0		2.1	4.6	1.4	2.6	1.6	2.1	
VAR	.0	.0	.0	.0	.0		.0	.0	.0	.0	.0	.0	
CALM	9.1						9.1	.0	7.5	12.9	10.6	5.9	
TOT OBS						60617		6.9	10033	19513	9083	21988	
TOT PCT	56.5	37.3	5.8	.3	*		100.0		100.0	100.0	100.0	100.0	

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NAVAL WEATHER SERVICE DETACHMENT ASHEVILLE N C
SUMMARY OF SYNOPTIC METEOROLOGICAL OBSERVATIONS (SSMO), SOUTH A--ETC(U)
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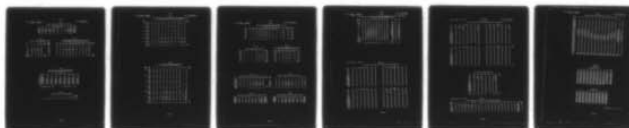
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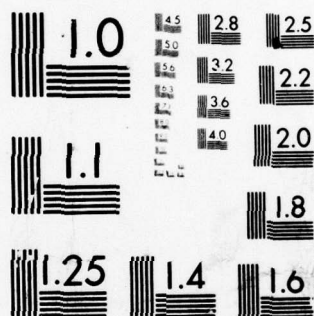
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

PERIOD: (PRIMARY) 1905-1976
(OVER-ALL) 1855-1976

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	CALM	WIND SPEED (KNOTS)						48+	MEAN	PCT FREQ	TOTAL OBS
		1-3	4-10	11-21	22-33	34-47					
0000	7.5	15.0	52.9	22.6	2.0	*	.0	7.8	100.0	10033	
0600	12.9	23.0	48.9	14.0	1.2	.1	.0	6.0	100.0	19513	
1200	10.6	21.5	49.9	16.8	1.1	.1	.0	6.5	100.0	9083	
1800	9.9	18.3	54.7	19.5	1.6	.1	.0	7.4	100.0	21988	
TOT								6.9			60617
PCT	9.1	19.7	51.8	17.6	1.4	.1	.0		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)
BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.2	.1	.3	.9		6.1
NE	.1	.1	.1	.4		5.8
E	.2	.1	.4	.7		6.1
SE	1.4	1.6	5.3	9.3		6.5
S	9.8	5.8	14.9	27.9		5.9
SW	2.2	1.3	2.6	5.5		5.8
W	.2	.2	.2	.6		5.6
NW	.2	.1	.2	.5		5.7
VAR	.0	.0	.0	.0		5.9
CALM	1.1	.6	1.2	3.5		6.0
TOT OBS					9406	
TOT PCT	15.5	9.9	25.2	49.4	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.0	*	.2	.6	.3	.1	*	*	*	.3	
NE	*	.0	*	.1	.3	.1	*	*	*	*	.0	.3
E	.0	*	*	.1	.5	.2	.1	*	*	*	.0	.5
SE	.1	.1	.3	2.2	6.0	3.4	.9	.3	.1	.1	.4	4.4
S	.1	.2	.6	6.9	18.3	9.2	2.4	.7	.2	.3	19.4	
SW	*	*	.1	1.4	3.6	1.5	.4	*	.1	.1	.4	4.3
W	*	.0	*	.1	.4	.2	*	*	.0	.0	.4	
NW	.0	.0	*	.1	.3	.2	.1	.0	.0	.0	.3	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	.0	*	.1	.7	2.0	1.1	.3	*	*	.1	2.0	
TOT OBS												9406
TOT PCT	.2	.3	1.1	11.9	32.0	16.2	4.3	1.1	.5	.6	31.9	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	* OR >10	* OR >5	* OR >2	* OR >1	* OR >1/2	* OR >1/4	* OR >50YD	* OR >0
* OR >6500	.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0
* OR >5000	1.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1
* OR >3500	5.6	6.3	6.4	6.4	6.4	6.4	6.4	6.4
* OR >2000	20.4	22.5	22.6	22.6	22.6	22.6	22.6	22.6
* OR >1000	49.4	54.5	54.6	54.6	54.6	54.6	54.6	54.6
* OR >600	59.8	66.2	66.4	66.4	66.5	66.5	66.5	66.5
* OR >300	60.7	67.2	67.5	67.5	67.5	67.5	67.5	67.5
* OR >150	61.0	67.6	67.8	67.8	67.9	67.9	67.9	67.9
* OR >0	61.1	67.7	68.0	68.0	68.1	68.1	68.1	68.1

TOTAL NUMBER OF OBS: 9585

PCT FREQ NH <5/8: 31.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8 OBSCD	TOTAL OBS
	7.4	6.8	6.6	5.8	5.1	4.3	7.8	11.9	44.2	10429

PERIOD: (PRIMARY) 1905-1978
(OVER-ALL) 1855-1978

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON-OCCURRENCE OF
PRECIPITATION WITH VARYING VALUES OF VISIBILITY

VSBY (NM)		N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	PCP	.0	.0	.0	*	.0	.0	.0	.0	.0	.0	*	
	NO PCP	*	.0	.0	.0	*	*	*	.0	.0	.0	*	.1
	TOT %	*	.0	.0	*	*	*	*	.0	.0	.0	*	.1
1<2	PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	NO PCP	.0	*	.0	*	*	*	*	.0	.0	.0	*	.1
	TOT %	.0	*	.0	*	*	*	*	.0	.0	.0	*	.1
2<5	PCP	.0	.0	.0	*	*	*	.0	.0	.0	.0	*	
	NO PCP	.1	*	*	*	.2	.1	*	*	.0	.0	*	.5
	TOT %	.1	*	*	.1	.2	.1	*	*	.0	.0	*	.6
5<10	PCP	*	*	*	.1	.1	.1	.0	.0	.0	*	.3	
	NO PCP	.6	.3	.2	1.9	5.9	1.5	.3	.2	.0	1.2	12.1	
	TOT %	.6	.3	.2	2.0	6.1	1.6	.3	.2	.0	1.2	12.4	
10+	PCP	*	*	*	.1	.2	*	*	.0	.0	*	.4	
	NO PCP	1.2	.8	1.2	14.8	51.4	9.9	1.2	.8	.0	5.1	86.5	
	TOT %	1.2	.9	1.2	14.9	51.6	10.0	1.2	.8	.0	5.1	86.9	
TOT OBS													12194
TOT PCT		1.9	1.2	1.4	16.9	57.9	11.7	1.5	1.1	.0	6.4	100.0	

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NE	E	SE	S	SW	W	NW	VAR	CALM	PCT	TOTAL OBS
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
1/2<1	0-3	.0	.0	.0	.0	*	*	.0	.0	.0	*	*	
	4-10	*	.0	.0	*	*	*	.0	.0	.0	*	*	
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	*	.0	.0	*	*	*	.0	.0	.0	*	*	
1<2	0-3	.0	.0	.0	.0	.0	.0	*	.0	.0	*	*	
	4-10	.0	*	.0	*	*	*	.0	.0	.0	*	*	
	11-21	.0	.0	.0	.0	*	*	.0	.0	.0	.0	*	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.0	*	.0	*	*	*	.0	.0	.0	*	.1	
2<5	0-3	*	.0	*	*	*	*	.0	.0	.0	.1	.2	
	4-10	*	*	*	.1	.2	.1	*	*	.0	.0	.5	
	11-21	*	.0	*	*	*	*	.0	.0	.0	.0	.1	
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
	TOT %	.1	*	*	.1	.2	.1	*	*	.0	.1	.7	
5<10	0-3	.3	.1	.1	.2	.9	.4	.1	.1	.0	1.5	3.4	
	4-10	.3	.2	.1	1.0	3.5	1.1	.2	.2	.0	.0	6.6	
	11-21	*	*	*	.5	1.2	.1	.0	*	.0	.0	2.0	
	22+	*	*	*	*	.1	*	.0	.0	.0	.0	.2	
	TOT %	.6	.3	.2	1.8	5.7	1.6	.2	.3	.0	1.5	12.2	
10+	0-3	.5	.3	.3	1.1	4.9	1.7	.3	.3	.0	7.0	16.5	
	4-10	1.0	.6	.7	7.3	28.6	7.4	.9	.7	.0	.0	47.2	
	11-21	.1	.1	.2	4.7	15.1	1.7	.1	*	.0	.0	22.0	
	22+	*	*	*	.3	.9	.1	.0	.0	.0	.0	1.2	
	TOT %	1.6	1.0	1.1	13.4	49.5	10.9	1.3	1.0	.0	7.0	86.9	
TOT OBS													15931
TOT PCT		2.3	1.3	1.4	15.3	55.5	12.7	1.6	1.3	.0	8.6	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NM >4/8) AND
OCCURRENCE OF NM <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NM <5/8 ANY HGT	TOTAL OBS
00003	.2	.4	1.2	10.3	28.6	14.6	3.8	.8	.5	.3	60.7	39.3	2369
06009	.1	.1	1.3	11.9	34.1	15.6	4.0	.6	.3	.8	68.9	31.1	2560
12015	.1	.5	.8	13.9	35.6	18.6	4.8	1.5	.4	.6	76.9	23.1	2565
18021	.4	.3	.9	9.7	26.2	14.5	4.0	1.3	.6	.5	58.4	41.6	2353
TOT PCT	.2	.3	1.1	11.5	31.3	15.9	4.2	1.0	.4	.6	66.5	33.5	9847 100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	*	.2	.8	11.8	87.3	3709
06009	.0	.1	.1	.8	15.4	83.6	5292
12015	.0	.1	.1	.8	11.4	87.6	3566
18021	.0	*	*	.6	10.3	89.0	3719
TOT PCT	.0	.1	.1	.8	12.5	86.5	16286 100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR
CEILING HGT (FEET, NM >4/8) BY HOUR

HOUR (GMT)	<150 <500D	<600 <1	<1000 <5	1000+ AND 5+	NM <5/8 AND 5+	TOTAL OBS
00003	.2	1.8	12.6	49.7	37.7	2300
06009	.1	1.6	14.0	56.3	29.7	2505
12015	.1	1.5	15.8	62.3	21.9	2520
18021	.3	1.6	12.0	48.6	39.4	2260
TOT PCT	.2	1.6	13.7	54.5	31.9	9585 100.0

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
85/89	.0	.0	*	.0	*	.0	.0	.0	*	*
80/84	.0	.0	.1	.1	.1	*	.0	.0	.3	.3
75/79	.0	*	.5	.7	.9	.2	.1	.1	2.3	2.3
70/74	.0	*	.1	.9	4.3	5.0	2.5	1.1	13.8	13.8
65/69	.0	.0	*	.7	5.9	10.9	7.3	2.2	27.0	27.0
60/64	.0	.0	*	.6	7.7	16.2	9.6	2.6	36.7	36.7
55/59	.0	.0	.0	.2	2.0	8.5	6.9	1.7	19.2	19.2
50/54	.0	.0	.0	.0	*	.1	.3	.1	.6	.6
TOT PCT	.0	*	.2	2.8	20.6	41.7	26.8	7.8	10789	100.0

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

N	NE	E	SE	S	SW	W	NW	VAR	CALM
.0	.0	.0	*	*	*	.0	.0	.0	.0
*	*	*	.1	.2	*	*	*	.0	.0
.0	*	.1	.4	1.3	.3	.1	*	.0	.2
.1	.2	.2	2.9	7.8	1.5	.2	.1	.0	.8
.4	.3	.5	4.8	15.5	3.3	.4	.3	.0	1.6
.8	.5	.6	6.9	20.0	4.2	.6	.5	.0	2.8
.7	.3	.2	2.5	11.1	2.4	.4	.3	.0	1.4
.1	*	.0	*	.4	.1	*	*	.0	*
2.0	1.3	1.5	17.5	56.2	11.7	1.6	1.2	.0	6.8

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	86	71	69	64	60	58	46	63.7	9930
06009	84	69	67	63	58	57	48	62.5	19613
12015	84	72	69	64	59	57	50	63.4	8978
18021	89	77	73	67	61	59	50	66.5	20790
TOT	89	74	71	64	59	57	46	64.2	59213

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.5	18.0	43.8	29.4	7.4	77	2844		
06009	.0	1.3	13.5	40.2	34.5	10.5	79	3242		
12015	.0	2.3	21.7	41.5	26.2	8.3	76	2704		
18021	.0	7.6	30.5	41.3	15.8	4.9	72	2520		
TOT	0	340	2265	4603	3011	891	76	11110		

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	49 52	53 56	57 60	61 64	65 68	69 72	73 76	77 80	81 84	85 88	TOT	N FOG	WD FOG
14/16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	.0	.1
11/13	.0	.0	.0	.0	.1	.1	.1	.1	.1	.0	42	.0	.4
9/10	.0	.0	.0	.1	.1	.2	.2	.1	.0	.0	84	.0	.7
7/8	.0	.0	.0	.1	.2	.3	.2	.1	.0	.0	142	.0	1.2
6	.0	.0	.1	.1	.2	.4	.2	.1	.0	.0	121	.0	1.1
5	.0	.0	.1	.3	.5	.4	.3	.1	.0	.0	195	.0	1.7
4	.0	.0	.1	.6	.7	.5	.3	.2	.0	.0	280	.0	2.4
3	.0	.0	.2	.8	1.1	.7	.3	.1	.0	.0	379	.0	3.3
2	.0	.1	.6	1.8	1.7	1.1	.5	.2	.0	.0	693	.0	6.1
1	.0	.1	1.2	2.4	2.2	1.2	.6	.1	.0	.0	840	.0	7.8
0	.0	.3	3.1	4.9	3.3	1.8	.7	.1	.0	.0	1605	.1	14.2
-1	.0	.3	3.8	4.3	3.2	2.0	.5	.0	.0	.0	1585	.0	14.0
-2	.0	.6	4.5	4.6	3.4	2.2	.6	.0	.0	.0	1793	.0	15.9
-3	.0	.6	4.3	3.4	2.4	1.6	.3	.0	.0	.0	1431	.0	12.7
-4	.0	.5	2.5	2.5	1.8	1.0	.2	.0	.0	.0	978	.0	8.6
-5	.0	.4	1.6	1.4	1.0	.7	.1	.0	.0	.0	586	.0	5.1
-6	.0	.3	.6	.6	.4	.3	.1	.0	.0	.0	268	.0	2.3
-7/-8	.0	.3	.5	.4	.3	.2	.0	.0	.0	.0	187	.0	1.6
-9/-10	.0	.0	.1	.1	.1	.0	.0	.0	.0	.0	38	.0	.3
-11/-13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8	.0	.1
-14/-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.0	.0
TOTAL											11314		
PCT	.1	3.6	23.3	28.6	22.8	14.9	5.2	1.3	.3	.0	100.0	.3	99.7

PERIOD: (OVER-ALL) 1963-1978

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.2	.2	.0	.0	.0	.0	.4	.2	.1	.0	.0	.0	.0	.3
1-2	.2	.4	.0	.0	.0	.0	.6	.1	.4	.0	.0	.0	.0	.5
3-4	.0	.1	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.4	.6	.1	.0	.0	.0	1.1	.3	.6	.0	.0	.0	.0	.9

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
41	.2	.2	.0	.0	.0	.0	.4	.4	1.0	.1	.0	.0	.0	1.4
1-2	.0	.5	.1	.0	.0	.0	.6	.4	4.4	1.7	.0	.0	.0	6.5
3-4	.0	.1	.1	.0	.0	.0	.3	.0	2.9	2.7	.0	.0	.0	5.7
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.4	1.9	.2	.0	.0	2.6
7	.0	.0	.0	.0	.0	.0	.1	.0	.1	.7	.2	.0	.0	1.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.2
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	.2	.8	.4	.0	.0	.0	1.3	.8	8.8	7.3	.5	.0	.0	17.5

PERIOD: (OVER-ALL) 1963-1978

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TABLE 18 (CONT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT
<1	1.7	3.8	.3	.0	.0	.0	5.8	.7	1.2	.1	.0	.0	.0	2.0
1-2	1.3	17.1	4.6	.0	.0	.0	23.0	.7	3.9	.5	.0	.0	.0	5.0
3-4	.2	8.0	9.8	.3	.0	.0	18.3	.1	1.7	1.1	.0	.0	.0	2.9
5-6	.0	1.7	5.2	.4	.0	.0	7.3	.0	.5	.4	.0	.0	.0	1.0
7	.0	.3	1.9	.6	.0	.0	2.9	.0	.2	.1	.0	.0	.0	.3
8-9	.0	.1	.5	.3	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.1
10-11	.0	.0	.2	.2	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOT PCT	3.2	31.0	22.6	1.9	.0	.0	58.7	1.6	7.3	2.2	.1	.0	.0	11.3

HGT	1-3	4-10	11-21	22-33	34-47	48+	PCT	1-3	4-10	11-21	22-33	34-47	48+	PCT	TOTAL PCT
<1	.1	.1	.0	.0	.0	.0	.2	.2	.2	.0	.0	.0	.0	.4	
1-2	.2	.6	.0	.0	.0	.0	.8	.4	.4	.0	.0	.0	.0	.4	
3-4	.0	.1	.0	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.1	
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	.3	.8	.1	.0	.0	.0	1.2	.2	.7	.0	.0	.0	.0	.9	92.8

WIND SPEED (KTS) VS SEA HEIGHT (FT)

HGT	0-3	4-10	11-21	22-33	34-47	48+	PCT	TOT
<1	11.9	6.7	.4	.0	.0	.0	19.1	DRS
1-2	3.2	27.1	6.9	.0	.0	.0	37.2	
3-4	.4	12.7	13.6	.3	.0	.0	27.0	
5-6	.0	2.6	7.5	.6	.0	.0	10.7	
7	.0	.6	2.7	.9	.0	.0	4.2	
8-9	.0	.1	.7	.4	.0	.0	1.2	
10-11	.0	.0	.2	.2	.0	.0	.4	
12	.0	.0	.0	.1	.0	.0	.1	
13-16	.0	.0	.0	.1	.0	.0	.1	
17-19	.0	.0	.0	.0	.0	.0	.0	
20-22	.0	.0	.0	.0	.0	.0	.0	
23-25	.0	.0	.0	.0	.0	.0	.0	
26-32	.0	.0	.0	.0	.0	.0	.0	
33-40	.0	.0	.0	.0	.0	.0	.0	
41-48	.0	.0	.0	.0	.0	.0	.0	
49-60	.0	.0	.0	.0	.0	.0	.0	
61-70	.0	.0	.0	.0	.0	.0	.0	
71-86	.0	.0	.0	.0	.0	.0	.0	
87+	.0	.0	.0	.0	.0	.0	.0	
TOT PCT	15.6	49.8	32.0	2.5	.0	.0	100.0	4516

PERIOD: (OVER-ALL) 1949-1976

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	3.0	8.6	12.2	5.7	1.5	.6	.2	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2647	3
6-7	.1	1.6	7.2	10.7	4.8	1.9	1.1	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2315	5
8-9	.0	.8	3.1	5.4	4.8	2.4	1.2	.3	.7	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	1555	6
10-11	.0	.5	1.2	1.9	1.8	.9	.7	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	628	6
12-13	.0	.0	.6	.7	.6	.5	.2	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	247	7
>13	.0	.0	.0	.3	.4	.2	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	108	8
INDET	3.1	1.4	1.8	1.4	.8	.4	.2	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	752	3
TOTAL PCT	6.2	12.9	26.0	26.1	14.7	6.9	3.7	1.5	1.6	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	8252	5

PERIOD: (PRIMARY) 1905-1978
(OVER-ALL) 1855-1978

TABLE 20

AREA 0030 ANTIOFAGASTA
22.15 71.6W

PERCENT FREQUENCY OF OCCURRENCE OF SEA TEMP (DEG F) BY MONTH

SEA TMP DEG F	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	PCT
96+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
95/96	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
93/94	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
91/92	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
89/90	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
87/88	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
85/86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.0
83/84	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.0
81/82	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	17	.0
79/80	.1	.7	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	55	.1
77/78	1.2	2.7	1.9	.2	.1	.0	.0	.0	.0	.0	.0	.0	264	.5
75/76	5.3	9.4	7.6	1.0	.0	.0	.0	.0	.0	.0	.1	.9	1034	1.8
73/74	12.0	18.1	13.2	5.7	.4	.0	.0	.1	.0	.0	.4	4.0	2349	4.0
71/72	17.8	18.2	13.7	10.7	1.9	.2	.0	.0	.0	.1	1.8	9.4	3318	5.7
69/70	20.8	17.4	16.1	15.1	6.3	.9	.1	.0	.0	.4	5.1	15.2	4472	7.6
67/68	21.9	15.4	16.3	19.5	16.6	5.0	.6	.2	.4	3.0	12.0	23.7	6356	10.9
65/66	12.6	9.2	12.0	17.7	21.0	14.2	9.9	2.0	2.2	7.9	20.8	21.3	7040	12.0
63/64	6.7	5.7	10.6	17.9	25.1	27.0	20.7	12.3	14.4	24.5	31.9	17.5	10765	18.4
61/62	1.0	2.4	5.1	8.2	15.2	22.5	28.9	24.4	23.6	30.3	18.5	5.5	9481	16.2
59/60	.4	.6	2.7	3.1	8.6	15.8	28.0	31.1	22.0	23.3	7.2	1.8	8064	13.8
57/58	.1	.1	.3	.8	3.5	7.8	13.2	21.4	20.2	8.2	1.7	.3	3904	6.7
55/56	.1	.0	.0	.0	.9	2.4	4.0	7.5	6.4	1.8	.3	.1	1170	2.0
53/54	.0	.0	.0	.1	.1	.1	.5	.7	.6	.3	.0	.1	125	.2
51/52	.0	.0	.0	.0	.0	.0	.2	.2	.1	.1	.0	.0	29	.0
49/50	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.1	.0	14	.0
47/48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	.0
45/46	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.0
43/44	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
41/42	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
39/40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
37/38	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
35/36	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
33/34	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
31/32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
29/30	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
27/28	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
<27	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
TOTAL	4796	3698	4451	4173	4338	4408	5310	4556	5191	6248	5673	5625	58467	100.0
MEAN	69.3	70.2	68.8	66.8	64.2	62.1	60.7	59.8	60.0	61.5	64.1	66.8	64.5	

TABLE 21

PRESSURE (MB)

AVERAGE BY HOUR (GMT)

MO	0000	0300	0600	0900	1200	1500	1800	2100	MEAN	TOTAL OBS
JAN	1013	1014	1014	1013	1014	1014	1014	1012	1014	2865
FEB	1013	1013	1014	1013	1014	1013	1014	1012	1013	2065
MAR	1013	1014	1014	1013	1014	1014	1014	1012	1014	2281
APR	1014	1014	1015	1014	1015	1014	1015	1013	1015	2257
MAY	1016	1016	1016	1015	1016	1015	1016	1015	1016	2248
JUN	1017	1016	1017	1016	1017	1016	1017	1015	1017	2499
JUL	1017	1017	1018	1016	1018	1018	1017	1016	1017	3111
AUG	1017	1018	1018	1017	1018	1017	1017	1016	1017	2715
SEP	1017	1017	1017	1016	1018	1018	1017	1016	1017	2928
OCT	1016	1017	1017	1016	1017	1016	1017	1015	1017	3652
NOV	1015	1017	1018	1015	1017	1016	1016	1014	1016	3146
DEC	1014	1014	1014	1013	1015	1013	1015	1013	1014	2889
ANN	1015	1016	1016	1015	1016	1016	1016	1014	1016	32656
OBS	5200	283	5883	2950	5135	299	10644	2262		

PERCENTILES

MO	MIN	1%	5%	25%	50%	75%	95%	99%	MAX
JAN	1005	1007	1010	1012	1014	1015	1017	1019	1020
FEB	1005	1008	1010	1012	1013	1015	1017	1018	1021
MAR	1007	1009	1010	1012	1014	1015	1017	1019	1023
APR	1007	1010	1011	1013	1015	1016	1018	1020	1025
MAY	1009	1011	1013	1015	1016	1017	1019	1021	1026
JUN	1008	1011	1013	1015	1017	1018	1021	1023	1028
JUL	1009	1011	1013	1015	1017	1019	1021	1023	1026
AUG	1008	1012	1013	1016	1017	1019	1022	1023	1030
SEP	1005	1011	1013	1015	1017	1019	1021	1023	1030
OCT	1007	1011	1013	1015	1017	1018	1020	1023	1027
NOV	1008	1010	1012	1014	1016	1017	1020	1021	1025
DEC	1008	1009	1010	1013	1014	1016	1018	1019	1048

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